DECEMBER 1988 QUARTERLY REPORT NAS MOFFETT FIELD, CALIFORNIA REMEDIAL INVESTIGATION/FEASIBILITY STUDY

VOLUME 6: APPENDIX I

DECEMBER 15, 1988

Prepared by:

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Submitted by:

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for:

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Submitted to:

Department of the Navy
Western Division
Naval Facilities Engineering Command
San Bruno, California 94066-0720

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

THIS RECORD CONTAINS MULTIPLE VOLUMES WHICH HAVE BEEN ENTERED SEPARATELY

VOLUME 1 OF 7 IS FILED AS ADMINISTRATIVE RECORD NO. **N00296.000543**

VOLUME 2 OF 7 IS FILED AS ADMINISTRATIVE RECORD NO. **N00296.000544**

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APPENDIX I - BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

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	W1-8(A)
	W1-9(F)
	W1-10(F)(ABAN)
	W1-10(F)
	W1-11(F)
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APPENDIX I

SECTION 1.0 - SITE 1 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

							BORING NO. GB#4
FEET	MPLE & NUMBER	÷ .		ှင့်သူ	SYMBOL	ш	COORDINATES N. 343,376.6
覆	SAMPLE E & NU	RECOVERY	WELL SUMMARY	MEASURED CONSISTENCY (TSF)		PROFILE	FIELD GEOLOGIST D. H. COX EDITED BY S. Logon DATE BEGAN 5/31/88
Нцазо	SA TYPE	RE(CON	USCS	ā.	CHECKED BY J. Hodgall DATE FINISHED 6/8/88 TOTAL DEPTH 212.0 ft. GROUND SURFACE EL. 2.5 ft.
	<u> </u>						DESCRIPTION
+ -	!		}	į	CL		SANDY CLAY; sandy loam, dark brown, dry, soft.
<u>t</u> :	1						5 1/2" casing installed from 0 to 5 feet. SILTY SANDY CLAY; blue gray, wet, stic.ky, plastic.
- 5 -	#1	2/60			СН		SANDY SILTY CLAY; slightly sandy, dark gray to dark brown,
1 2			}				molst, plastic. SILTY CLAY; medium to dark gray, moderately wet, plastic,
10-	# 2	3/60			ı		moderate organic matter.
F 3					OL		SANDY CLAY; silty, medium to dark gray, moist, stiff,
F	<i>#</i> 3	11/60					abundant coarse shell fragments, whole mollusca. Trace of rounded coarse sand.
15							SILTY CLAY; medium to dark brown, stiff, moderately plastic.
E 3		42 (52					SANDY CLAY; light to medium brown, molst, stiff to hard, non-plastic, sand; fine to coarse, subangular, poorly
20-	#4	42/60					sorted.
1							SILTY CLAY; light to medium brown, moderately dry, stiff,
25	# 5	4/60					interbedded with sand; fine to coarse, subrounded, poorly sorted.
1 1	#6	4/60			CL		
-30 -	,,	,			CL		SANDY CLAY; medium brown, moderately dry, stiff, medium to coarse rock fragments (gravel).
‡ ‡							•
35	#7	NO REG.					Coarse angular sand and gravel over shaker.
F							
40	#8	7/60					
E^{u}							
E 3		1			SW		SAND; medium to dark gray-brown, wet, fine to medium, moderate to well sorted.
- 45 -	#9	8/60					
<u>t</u>							SANDY CLAY; light to medium brown, moist, stiff.
-50	#10	10/60		1			SANDY CLAY; medium to dark gray, moist, stiff, slightly plastic, minor coarse gravels.
F ‡			j				SILTY SANDY CLAY; medium brown, moist, stiff.
F_ = =	#11	7/60	}				
-55-	"	,))	j			ĺ
E 7					CL		SILTY CLAY; medium gray to medium brown, moist, stiff, slightly plastic.
60	#12	20/60		l			SANDÝ ČLAY, medium gray to medium brown, moist, stiff, slightly plastic, minor coarse gravel.
E				- 1	ļ		SILTY CLAY, medium brown, moist, stiff, slightly plastic.
65	#13	13/60		ļ	ļ		
<u> </u>				ļ			
<u> </u>	#14	0/60		ļ	ł		
L 70-1	i					VIII	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

			***				BORING NO. GB#4
SEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D. H. COX EDITED BY S. Logon DATE BEGAN 5/31/88 CHECKED BY J. Hadsall DATE FINISHED 6/8/88 TOTAL DEPTH 212.0 ft. GROUND SURFACE EL. 2.5 ft.
70 -	# 14	0/60				1111	DESCRIPTION
F }	y '	-0/80					SILTY CLAY; medium brown, moist, stiff, slightly plastic.
75 -	# 15	0/60					SANDY CLAY; medium gray brown, moist, stiff, moderately
an -	# 16	6/60	·				plastic.
85 -	# 17	9/60					
90 -	∦ 18	6/60					SILTY CLAY; medium gray, moist, stiff, moderately plastic.
95	# 19	8/60	.				
100	#20	6/60					SANDY CLAY; medium brown, moist, stiff, slightly plostic.
105	#21	7/60			CL		SILTY CLAY, medium gray, moist, stiff, slightly plastic, homogeneous.
110	#22	10/60					
-115	# 23	9/60					
120	#24	12/60					
-125	#25	8/60					
130	# 26	46/60					SANDY SILTY CLAY; medium to dark gray interbedded with medium brown clay, dry to moist, stiff, slightly plastic, homogeneous. SILTY CLAY; medium to dark gray, dry, very stiff, slightly
135	#27	9/60					plastic, homogeneous.
E, 1	# 28	18/60					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB4.DWG

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...Creating a Safer Tomorrow

	····						BORING NO. GB#4
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D. H. Cox EDITED BY S. Logon DATE BEGAN 5/31/88 CHECKED BY J. Hadsall DATE FINISHED 6/8/88 TOTAL DEPTH 212.0 ft. GROUND SURFACE EL. 2.5 ft. DESCRIPTION
140	# 28	18/60					
ŀ -	720	10/00					SILTY CLAY; medium to dark gray, dry, stiff, slightly plastic, homogeneous.
-145	# 29	13/60					
150	# 30	31/60					SANDY CLAY; medium brown, pred. dry, stiff, slightly plastic, homogeneous.
155 -	# 31	40/60					SILTY CLAY; blue gray, dry, stiff, slightly plastic.
160	# 32	32/60			CL.		
165	# 33	28/60					
170	# 34	50/60					
115-	# 35	49/60					SILTY CLAY; medium to dark gray, dry, stiff, non-plastic, homogeneous.
180	#36	44/60					SANDY CLAY; medium to dark gray, blue gray, dry, stiff, abundant shell fragments.
 - 185 -	#3 7	0,/60					GRAVELLY SANDY SILTY CLAY; medium to dark blue gray, medium stiff, slightly plastic, interbedded with coarse angular gravels.
190	/38	18/60			CCC -		Driller reports hard drilling, "chattering", possibly gravels.
195	/ 39	0/60					Sands and gravel over shaker.
200	# 40	7/60					SANDY CLAY; medium gray, moist, stiff, slightly plastic, associated coarse angular gravels.
205	# 41	2/60			CL		SANDY CLAY; medium gray brown, moist, stiff, slightly plastic.
E 210	#42	0/60					Sands and gravet over shaker.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB4.DWG

(TOTAL DEPTH 212 FEET) 4-1/2 diameter boring PAGE 3 OF 3



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							BORING NO. GB#5
O DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (.N.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	NSCS SYMBOL	PROFILE	FIELD ENGINEER D. COX FOITED BY E. Wessner DATE BEGAN 6/20/88 CHECKED BY J. Hadsoll DATE FINISHED 8/22/88 TOTAL DEPTH 253 feet GROUND SURFACE EL. 0.2 ft.
- 7 -					.41		LOAM; light brown, dry, silty, fine sand, non plastic.
F 7					ML		5 1/2 " casing installed from 0 to 6 1/2 feet.
5		0/60			CL		CLAY; dark gray, soft, sticky.
Ł d	# 1	0780					SANDY CLAY, dark gray to gray brown, wet, soft, with
10	#2	2/60					sandstone fragments, light brown.
15 -	# 3	11/60					SILTY CLAY; dark gray, wet, soft, sticky, plastic, with occasional shell fragments.
\mathbf{E}					СН		SANDY CLAY; light gray, moist, soft to stiff, sticky, plastic.
[20]	#4	12/60					
[]							SILTY CLAY; medium brown to brown gray, moist, stiff,
25	# 5	10/60					pla s tic.
t :							SANDY CLAY; medium brown to brown gray, moist to dry, stiff, slightly plastic.
30	# 6	9/60			CL		SILTY CLAY; light to medium brown, dry, stiff, slightly
-35	# 7	9/60					plastic, increasing sand.
-10	# 8	0/60					Shaker sample: sand; coarse, subangular to subround, moderately well sorted quartz, with sandstone; medium brown and dark gray fragments, rounded coarse gravel.
-45	# 9	0/60					
50	# 10	0/60			GW		
- 55 -	<i>#</i> 11	0/60					
60	#12	0/60				000000	Shaker sample: sand; medium to coarse, subangular to subround, moderately sorted quartz, with light brown to dark gray, siltstone and sandstone fragments.
65-	#13	0/60					
E1	#14	7/60			СН		SILTY CLAY; medium gray brown, molst, stiff, plastic.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-G85.DWG

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		T					DODING NO CDUS
h	1 %	1	•		۲	1	BORING NO. GB#5
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	ալ	FIELD ENGINEER D. Cox COORDINATES N 342.514.2 E 1.548.942.5
ž	SAMPLE E & NUI	õ≥	WELL SUMMARY	SS F	હ	PROFILE	EDITED BY E. Wessner DATE BEGAN 6/20/88
ЭЕР ТН	N S A	1 22 ~		SNE -	USCS	æ	CHECKED BY J. Hadsall DATE FINISHED 8/22/88
)E	} }	1		٥	ΩS	1 1	TOTAL DEPTH 253 feet GROUND SURFACE EL. 0.2 ft.
- 70 -	<u> </u>	ļ					DESCRIPTION DESCRIPTION
} -	# 14	7/60					SILTY CLAY; light brown, gray brown, moderately dry, stiff, slightly plastic with sand; medium—coarse, subangular to
	1	 					subround, moderately sorted quartz, and gravel.
75	<u> </u>	1					
F .	# 15	1/60			CL		
t :	1	.[] (CL		
F -	}						SILTY CLAY; medium gray, moderately dry, stiff, slightly plastic.
80	# 16	15/60	} }				prostre.
} -	1	1	}	1	· .		
t :	1						SANDY CLAY; medium gray brown, moist, stiff, plastic.
- 85 -	#17	10/60					
	1	1		j			
ŀ -	 				СН		
90 -	1	10 /00			٠.,		
- " -	#18	10/60		l			
t :	İ]					
} -	1))				SILTY CLAY; medium-dark gray, moderately dry, stiff, plastic.
95 -	# 19	42/60					SILTY CLAY; medium gray to brown gray, dry, stiff, brittle, non-plastic.
} -		l i					,
				l			
- tob -	# 20	22/60		ĺ			
		1		1			
├ ┐		ti		- 1			
105	# 21	42/60					
· -	721	142/00		1			
F 3		ł		1			
- 110 -							
['''']	# 22	15/60		i			
t i]]		1			
├				1			SILTY CLAY; minor sand, medium gray to brown gray, dry, stiff, brittle, non-plastic.
115 ~	#23	40/60		ļ			our, ortus, non produc.
⊦ ∃				l	CL.		t
ļ 1				İ			Í
-120-	#24	56/60		1	Ī		1
F 1			}	1	E		i
է ተ			1 1	ļ	ţ]
125	∉ 25	60/60		- 1			
է ქ	# 20	30/80]]	1	Ī		ı
F 7				1			SILTY CLAY; dark gray, moderately dry, stiff, sticky,
130		ļļ		- {			slightly plastic.
┟┈ ┥	#26	29/60			•		į
t 1]]				
┝┤		}		1			SILTY CLAY; dark gray, dry, stiff, brittle, non-plastic.
-135	#27	60/60		- 1	-		
┞┤			1 1	- 1	3		
‡ ‡	# 28	56/60					
Γ_{001}						1111	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB5.DWG

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		Τ -			Т		BODING NO CDUE
FEET	3ER			 	힏		BORING NO. GB#5
Z E	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	SYMBOL	4	FIELD ENGINEER D. Cox COORDINATES N. 342.514.2 E. 1,548.942.5
	SAMPLE E & NUI	0 2	WELL SUMMARY	EASL VSIST	J	PROFILE	EDITED BY E. Wessner DATE BEGAN 6/20/88
EP TH	7 . S. A.	2		₹Ö`	uscs	u.	CHECKED BY J. Hadsall DATE FINISHED 8/22/88 TOTAL DEPTH 253 feet GROUND SURFACE EL. 0.2 ft.
							DESCRIPTION
140 -	#28	56/60					SILTY CLAY; 'medium to dark gray, dry, stiff, non to slightly plastic.
<u> </u>							angitty plustic.
145		20 /22		1			
F 1737	# 29	26/60			CL		
F 7					İ		
150	# 30	60/60		3.0			
F " -	# 30	00/60		3.0			SILTY CLAY; dark gray, dry, very stiff, brittle, non-plastic.
F 7				<u> </u>	ļ		SILTY CLAY; gray brown, soft, moist, plastic.
155 -	#3 1	60/60		1.5	СН		SICIT CERT, gray prown, sort, moist, plastic.
t i	# J1	00,00		'.5	-		SILTY CLAY; dark gray, dry, stiff, non-plastic.
F 7		├ ┤					
160	#32	60/60		3.5			
L 1	•		1				
}							
165	#33	30/60		3.0			
1 1							
t i		1		 			SILTY CLAY; light to medium gray, moderately dry, stiff,
170	#34	60/60		3.0	CL		non to slightly plastic.
F 1							CLAY/SILTY CLAY, dock area down stiff heistle non to
<u>t</u> <u>†</u>							CLAY/SILTY CLAY; dark gray, dry, stiff, brittle, non to slightly plastic.
-175-	#35	27/60		1.8			
F 7							
‡ ‡							SANDY SILTY CLAY; minor sand, dark gray, moist, stiff,
180 -	# 36	7/60			ı		slightly plastic, shell fragments, Incr. sand.
FF							
F 7							SANDY CLAY; brown gray, moist to wet, very stiff, plastic, sand; fine to coarse, subangular subround, moderately to
185	#3 7	27/60		2.5	СН		poorly sorted quartz with slitstone and sandstone fragments,
F -	ì						shell fragments
F 7				[]			SANDY CLAY; brown to gray brown, predominantly dry, very stiff, non to slightly plastic
- 'au-	#3 8	34/60		3.0			attr, from to singificy product.
t 1							SILTY CLAY; minor sand, brown to gray brown, moist to dry,
FF							very stiff-hard, slightly plastic to non-plastic
195-	# 39	49/60		4.0			
t d]					
F					CL		SANDY CLAY; brown to gray brown, moist, very stiff, slightly plastic.
200-	# 40	24/60		2.0-			`
t 1				3.5			
H -]					SANDY CLAY; gray to brown gray, moist, stiff, slightly plastic with sand; coarse, angular to subangular.
205	#41	22/60	1	1.5			moderately sorted quartz and angular gravels.
t 1				<u> </u>			}
F T	#42	19/60			İ		
- 210 -						****	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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... Creating a Safer Tomorrow

							BORING NO. GB#5
JEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD ENGINEER D. Cox FIELD ENGINEER D. Cox EDITED BY E. Wessner DATE BEGAN 6/20/88 CHECKED BY J. Hodsall DATE FINISHED 8/22/88 TOTAL DEPTH 253 feet GROUND SURFACE EL. 0.2 ft.
250	# 42	19/60		4.0			SILTY CLAY: dark gray, predominantly dry, very stiff—hard., brittle, slightly to non—plastic.
215	# 43	35/60		3.0			
-220-	# 44	54/60		3.0- 4.0			CILTY CLAY, Baka As mostly many anadam to antily day, year,
225	#45	26/60		3.0			SILTY CLAY; light to medium gray, predominantly dry, very , stiff, slightly plastic.
230	# 46	28/60		3.0	CL		
235	#47	60/60		3.5- 4.5			
-240 -	#48	52/60		3.5- 4.0			SANDY CLAY; medium gray, moist to wet, stiff, slightly
-245-	/ 49	19/60		2.5			plastic.
:50 	# 50	10/60		2.5			
-255 -	,					7777	TOTAL DEPTH 253 FEET 4-1/2" diameter boring
250							
265							
270							
275							
E280				<u> </u>			

DRILLING CO.: Water Development Co.

DRILLING METHOD: Mud Rotary

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB5.DWG

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		T	1	1		_	DODING NO CDIO
1 5	<u>بر</u> 2			,	لے ا		BORING NO. GB#6
FEE	MPLE & NUMBER	RECOVERY		MEASURED CONSISTENCY (TSF)	SYMBOL	<u> </u>	FIELD ENGINEFR D.H. Cox COORDINATES N. 342.233.0 E 1,549,873.7
Ζ.	SAMPLE E & NUI	o z	WELL SUMMARY	SISTE SISTE		PROFILE	EDITED BY E. Wessner DATE BEGAN 6-10-88
EP TH	SAI TYPE 4	AEC (ONS.	SCS	ď.	CHECKED BY R. Sorbo DATE FINISHED 6-14-88
'n	ξ.		!		Š		TOTAL DEPTH 153.0 ft. GROUND SURFACE EL. 3.0 ft.
- 0 -		├					DESCRIPTION
1 -					CL.		SANDY CLAY; sandy loam, dark brown, dry, soft. 5 1/2" casing installed from 0 to 8 feet.
F 3]					SANDY CLAY; blue gray to dark brown, moist, plastic.
5 -				[[• •
\mathbf{F}				i l	СН		SILTY CLAY; dark gray to dark brown, moist, plastic.
E 1		 		, ,			
F +		1					CLAYEY SAND; gray, wet, soft, fine to coarse, subround to angular, moderate to poorly sorted quartz, interbedded
101	# 1	0/60					with assorted angular gravels.
F 1		ľ		1 1			
t i		† — ·					
15	#2	0/60			~_		
t i	π4-	0/80			SC- CC		
\mathbf{F}					1		CLAYEY SAND; dark gray, soft, sticky.
20				}			CLATET SAINO, dark gray, soit, sticky.
 	#3	0/60					
t 1							
\mathbf{F}				[CL	m	SANDY CLAY; light brown, soft, sticky. SANDY CLAYEY GRAVEL; medium gray to blue-gray, moist,
25	#4	8/60		i	GC		soft, with sand; fine to coarse, subangular to subround,
F 7		[]					moderate to poorly sorted quartz. GRAVELLY SANDY CLAY; light brown, moist, soft, sticky,
t t							slightly plastic, abundant coarse sand and assorted gravels.
F30 7	# 5	25/60					
Εd	#J	23,60]]				SANDY CLAY; light gray to light brown, moist, stiff, slightly plastic.
F 7							
35							
F 3.7	# 6	16/60		ł	ı		ł
<u>t</u> 1				1			
F 🚶					_ [GRAVELLY SANDY CLAY; brown gray, moist, stiff, slightly
E40 +	#7	21/60			CL		plastic, interbedded with assorted coarse sands and angular gravels.
F 1					ŀ		g. 5 . 5 . 5.
}				- 1			J
45	#C	1					
F 1	#8	4/60			1		ļ.
F 1							ł
F _{2.} ∮	- 1	•			ŀ		
[50]	# 9	4/60	1 1	1			
1		ſ	[[ļ.			CLAYEY SAND; medium brown, wet, soft, interbedded with
! ታ	t			- 1			minor coarse angular gravels, sands are fine to coarse,
554	# 10	2/60		ļ			subangular to subround, moderate to poorly sorted.
t 1	"	-, 55		1			
├					SC		
60	ľ	- 1	1 1				
F 3	#11	1/60					
<u> </u>	<u>. </u>						
F 7							SANDY CLAY; fine to coarse, subangular to
F65+	#12	0/60					subround, moderate to poorly sorted quartz with siltstone and sandstone grains assorted, predominately dark gray in
F]	Į			1	CL		clay; medium to dark gray, wet, soft. Also fine to medium
├ ┼	- 1						fragments of chert, feldspar.
$L_{70}1$	#13	0/60		L	1		

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-G86.DWG

PAGE 1 OF 3



...Creating a Safer Tomorrow

							BORING NO. GB#6
S LEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD ENGINEER D.H. Cox FIDITED BY E. Wessner CHECKED BY R. Sorbo TOTAL DEPTH 153.0 ft. DESCRIPTION COORDINATES N 342.233.0 E 1.549,873.7 DATE BEGAN 6-10-88 DATE FINISHED 6-14-88 GROUND SURFACE EL. 3.0 ft.
- 70 - 							SANDY CLAY; fine to coarse, subangular to
75	#13 	u\e0			CL		subround, moderate to poorly sorted quartz with siltstone and sandstone grains associated, predominately dark gray. In clay, medium to dark gray, soft, wet. Also fine to medium fragments of chert, feldspar.
┣ -	ł	l					
80 -	# 15	0/60			GC		SANDY CLAYEY GRAVEL; dark gray, wet, soft, organic matter; sticks, and sand; fine grain, well sorted quartz with assorted fragments of medium gray sandstone and siltstone.
F -				j			SILTY CLAY; medium gray to gray—green, moist, stiff, slightly plastic.
85 -	# 16	20/60					signay prostic.
90	#17	20/60			CL		
95 -	#1B	7/60					SANDY CLAY; medium gray brown, soft to moist, stiff slightly plastic, moist.
100	#19	24/60			sc		CLAYEY SAND,medium gray to gray brown, moist, stiff slightly plastic.
-105	#20	12/60					·
110	#21	42/60					SANDY CLAY; medium gray to green gray, flecks of brown interbedded, moist, stiff, slightly plastic.
-115 - - 115 -	#22	20/60					SANDY CLAY; light to medium brown, stiff, slightly plastic.
120	#23	16/60			: 		SANDY CLAY; medium gray to gray brown, moist, stiff slightly plastic.
175	#24	43/60			CL		SANDY CLAY; interbedded with coarse sands and assorted angular gravels, moisture content increasing.
1.50	#25	0/60					SILTY CLAY; blue gray with browns, moderately dry, stiff slightly plastic.
1.35	# 26	59/60					- 9 / ,
E.,,]	#27	40/60					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB6.DWG

PAGE 2 OF 3



... Creating a Safer Tomorrow

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<u></u>	<u>ar</u>				_	1	BORING NO. GB#6
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SAMPLE TYPE & NUMBER	¿		MEASURED CONSISTENCY (TSF)	USCS SYMBOL	Щ	COORDINATES N. 342.233.0 = FIELD ENGINEER D.H. Cox E.1,549,673.7
7.	APLE NL	RECOVERY (IN.)	WELL SUMMARY	ISUR 1STE TSF	S	PROFILE	FIELD ENGINEER D.H. Cox ENTED BY E. Wessner DATE BEGAN 6-10-88
ЭЕР ТН	SAA	REC		MEA	scs	α.	CHECKED BY R. Sorbo DATE FINISHED 6-14-88
DE	₹			0	Š		TOTAL DEPTH 153.0 ft. GROUND SURFACE EL. 3.0 ft.
-140 -					<u> </u>		DESCRIPTION SILTY CLAY; blue gray with browns, moderately dry, stiff,
<u>t</u> 1	#27	40/60					slightly plastic.
╟┤		ļ			İ		Color is predominantly blue—gray.
145		- (20					
t i	#28	5/60			CL		
+ +							
150	#20						
F 1	#29	53/60]			
F 7							
155							TOTAL DEPTH 153.0 FEET 4-1/2" diameter boring
F 4			İ				The diamoter pointy
F 1							
160							
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F 1							
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[210]						1	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-G86.DWG

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...Creating a Safer Tomorrow

							BORING NO. $W1-5(A)$
FEET	SAMPLE TYPE & YUMBER	>		 z ~ ~	SYMBOL	l	<u> </u>
77	a j	RECOVERY	VELL SUMMARY	BLCAS ON SAMPLER (PER 6")	₩.	PROFILE	FIELD FNGINEER W. Hopkins COORDINATES N. 343.385.2
Ŧ	32.7.4.F.	ECO .		SEW	g	9.0	EDITED BY E. Wessner DATE BEGAN 6/24/88 CHECKED BY J. Hadsall DATE FINISHED 6/27/88
ЈЕРТН	ΥPE	α .			USCS		TOTAL DEPTH 21.5 feet GROUND SURFACE EL. 2.4 ft.
-0-							DESCRIPTION
F]		2 // 2	8"x5' standpipe-// 1		CL		SILTY CLAY; tan, moist, soft, medium plasticity.
<u> </u>	MD#1	8/18	top of casing	3,4,6	- CL	11	
- , -	MD#2	10/18		1,3	l		SILTY CLAY; brown mottled red, wet, soft, high plasticity.
[]	MD#3	18/18	4" sch. 40 PVC	ND			₹ 16:30, 6-24-88
			Bentonite/				CLAY; gray, soft, wet, high plasticity.
	S	ND	cement grout		СН		
- 10 -	MD#4	18/18	Bentonite pellets	ND	1		
b d			10.4 to 12.2 ft.		i		
F	5	42/42					
15			4" .010 PVC	}	GW	999	SANDY SILTY GRAVEL; gray, wet (saturated), loose.
+	s	36760	screen, 14.5 to 19.5 ft.			11/2	SANDY SILTY CLAY; gray, wet, soft, low plasticity.
	٦	30,00	#10 and		CL		
201	ND	ND	#1C sand	6,8,9			SILTY CLAY; brown mottled gray with fibers of white, moist, stiff, moderately plastic.
+ +	· —				_	777.	TOTAL DEPTH 21.5 FEET
1 1			12"				
25 =							NOTE: Water standing in hole at end of day at 5'-10".
F 7							·
t 1							
30 -							
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$L_{70}1$							

DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

	T				_	_	
F	l g			ĺ		1	BORING NO. $W1-6(A)$
FEET	SAMPLE TYPE & NUMBER	≿ _		z. C	USCS SYMBOL		COORDINATES N. 342.228.3
3	발물	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLE (PER 6")	3	PROFILE	FIELD ENGINEER J. Hadsall E 1,349,384.4
Æ	¥ ¥ ¥			SA	S.	PRG	EDITED BY E. Wessner DATE BEGAN 7-18-88 CHECKED BY J. Hadsall DATE FINISHED 7-18-88
DEP 714	₹" إ	۳ ا	ļ	" ~	US(TOTAL DEPTH 34 ft. GROUND SURFACE EL. 1.2 ft.
į .		<u> </u>					DESCRIPTION
10	-		12" Christy			rii.	ASPHALT
t:	MD#1	8/18	Box	11,11,12	1		SILTY SANDY GRAVEL FILL; medium dense, moist, fine grained
F -	}		Top of casing		FILL	l	to medium grained sand, gravel clasts, subrounded to subangular (1/4 to 1/2").
5 -	dup	12/18	Bentonite/cement	3,2,2	1	ĺ	
- -	MD#3	15/18	grout	1,1,1	 	1111	SILTY CLAY; dark brown/gray, moist, very soft, moderately
	MD#2	12/18	4" sch. 40 PVC	1,1,1	1		plastic, organic odor, grass roots interspersed thoughout.
10-	MD#4	14/18	Bentonite pellets	1,1,1			
		147,13	10.75' to 12.5'—		CL		
t :	i !	[Ì		Mixture of slough from upper fill, undistiguishable. Water first encountered at 15 feet, 718-88, 12:15
15-			#1C sand				1 ♥
t :	MD#5	18/18		6,8,8	 		SILTY CLAY; medium brown, very molst, stiff, mod. plastic, grading to sandy silty clay.
	s	30/42			[SILTY SAND, medium brown, saturated fine grained sand, grades to clean fine grained sand.
20-							Grading to medium grained clean sand.
IFĨ∃			4" .010 sch.40 PVC screen, 15'				
	s	36/60	to 30'		SM GW		
- -					GW.		Grading to coarse grained clean sand.
25							Grades to pebbley gravel
E i	s	36/60					
F 4		00,00					SILTY CLAY; tan brown-orangish brown, moist, very stiff,
30					C 1		moderately plastic.
} -	s	48/48	Benton te		CL		
1 1			backfill				
- 35 -		•	12.0*				TOTAL DEPTH 34 FEET
F 7			1				
E d		·					
- 40 -							
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DRILLING CO.: Water Development Co.
DRILLING METHOD: CME-55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station

Moffett Field, California

PAGE 1 OF 1



...Creating a Safer Tomorrow

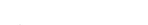
SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: MF-W16A.DWG

Γ'''		7	T	,	T	_	DODING NO WAY STATE
ts	4	1	}	~			BORING NO. $W1-7(A)$
FEET	MPLE & NUMBER	ğ.,		₹₩.	SYMBOL	۳ ا	FIELD GEOLOGIST J. Hadsall COORDINATES N. 342,492.2
z T	SAMPLE TYPE & NUN	RECOVERY (IN.)	WELL SUMMARY	BLOWS OF SAMPLER P (PER 6"	8	PROFILE	EDITED BY E. Wessner DATE BEGAN 6/28/88
DEP TH	A π	A A		19 §	SSCS	ľ.	CHECKED BY J. Hadsall DATE FINISHED 6/29/88
Ğ	ξ.		157	"	٦		TOTAL DEPTH 75 ft. GROUND SURFACE EL.
-0-		 	8"x5' standplpe/ /	 -	-		DESCRIPTION SILTY SAND; light brown, dry, loose, loam, fine
ļ ;	MD#1	9/18	1' stick-up-	5,3,3	SM		grained sand.
ļ :	MD#2	8/18	top of edailing	1,1,1	1		CLAY; dark gray, moist, very soft, sticky, organic appearance.
- 5 -	MD#3	13/18			1		grass roots thoughout.
	WD#2	13/18	[명 [8	'	OL		
t :				İ	"		
10-	MD#4	15/18		1,1,2	ł		SILTY CLAY; dark gray, very soft, low plasticity, organic
F 3	W-0 # *	13718		1,1,2	ł		odor.
	s	42/42	Bentonite/ cement grout		GC	***	▼ Water first encountered at 13', 6/28/88, 12:00.
- 15 -	MD#5	18 /19			OL		SILIY CLAY; dark gray, very soft, low plasticity.
[]	MU#3	18/18	4" sch.40 PVC	1	1		SANDY SILTY CLAY; mottled brown, slightly moist, stiff,
t i	s	20/42	casing ————				low plasticity, very fine grained sand.
20-		l		1	l		SILTY CLAY; brown, molst, stiff, moderately plastic.
1 1					ŀ		
Ł	S	48/60					SILTY SANDY CLAY; brown, moist, stiff, low plasticity, pebbley.
25		 					SILTY CLAY; brown, mottled tan, moist, stiff, moderately
1 1					CL		plastic.
F +	5	0/80	A A		O.L		
30							
1 1	MD#6	16/18		5,7,7			Geotech sample.
+	s	3/42					
-35			Bentonite pellets				
td		1 1	35 to 37 ft. — ■				
1	S	32/60					
40							
t d			4" .010 PVC				SILTY SAND; medium brown, wet, loose, fine grained sand,
FF	S	30/60	70 ft.				fully saturated sand at 41 feet.
45							i
F ~~					SM		i
F 1	s	24/60		l	ı		
50-			==	[]		<u> </u>
F"-	MD#7	10/18	#1C sand ————————————————————————————————————	5,5,4	sw]	Geotech sample; grades into clean, fine grained sand.
F 1	s	24/42					SILTY GRAVELLY SAND; medium brown, wet, loose, medium grained sand.
- - - 55		,			SM		•
F 4							
F 1	s	30/60		ļ			
Earl							SAND; gray brown, wet, loose, clean medium grained sand.
60 +							
t d	s	0/60				******	
F - 1	ľ			ľ	SP		
65							
t d	s	18/60		Ì			
		-,				*******	Grading from medium grained sand to coarse grained sand with gravel in last 2 inches. 70.0'
 7∩ - - -			NSS 4504				with gravel in last 2 inches. 70.0'

DRILLING CO.: Water Development Co. DRILLING METHOD: Hollow Stem Auger — CME 55

PAGE 1 OF 2



SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

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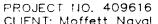
PROJECT NO. 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-W17A.DWG

				1			BORING NO. W1-7(A)
JEPTH REEF	SAMPLE TYPE & NUMBER	RECOVERY (34.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	COORDINATES N. 342.49.2 E. 1,548,950.5 FDITED BY E. Wessner DATE BEGAN 6/28/88 CHECKED BY J. Hadsail DATE FINISHED 6/29/88 TOTAL DEPTH 75 ft. GROUND SURFACE EL. 2.4 ft. DESCRIPTION
	S	54/60	Bentonite slurry used to backfill clay aquitard —		CL		CLAT; medium brown, moist, stiff, moderately plastic.
- 85		•	12				TOTAL DEPTH 75 FEET
L ₁₄₀ 1				<u> </u>	L		

DRILLING CO.: Water Development Co.
DRILLING METHOD: Hollow Stem Auger -- CME 55

PAGE 2 OF 2

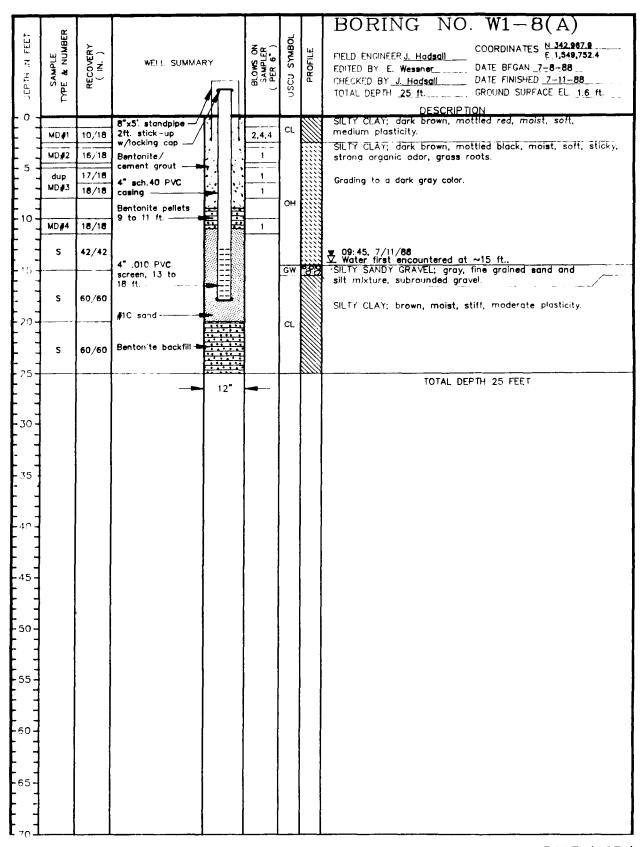


CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF -W17A DWG



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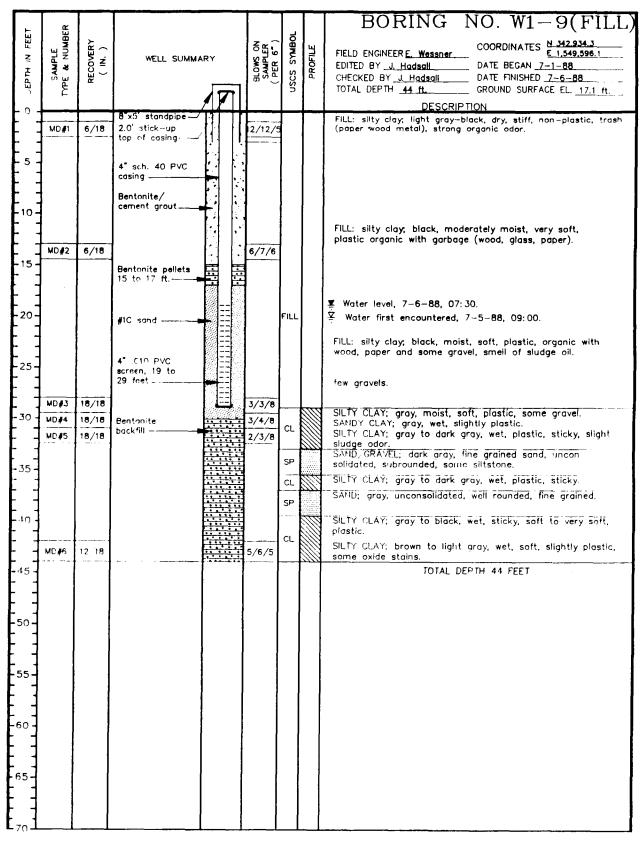


DRILLING CO.: Water Development Co.
DRILLING METHOD: CME 55 Hollow—Stem Auger

PROJECT NO. 409616 LOCATION: Moffett Naval Air Station Moffett Field, California

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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-W1-9.DWG

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### WELL SUMMARY \$\frac{\partial \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{P} \text{Sign} \text{Sign} \text{P} \text{Sign} \text{Sign} \text{P} \text{Sign} \text{Sign} \text{P} \text{Sign} \text{Sign} \text{Sign} \text{P} \text{Sign} \	1.	م ا		j	į.	l	l	BORING NO. $W1-10(F)$
Moji 6/16	EET	9	>		1, ~	절	1	(ABANDONED)
Moji 6/16	L	벌호	£ ^	WELL CLIMALAE	, jeg 6	1	빌	FIELD ENGINEER E. Wessner COORDINATES E 1,549,542
Moji 6/16	II.	AN P	g z	WELL SUMMAN	A SW S	S	۵	
Moji 6/16	F P	y H	R)		1 1 1 1 1 1 1 1 1 1	SS	ů.	
Mop 6/18 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7 1.2.3 1.2.7	5	≿	ļ			~		
Mog/s 6/18	-0-					├		DESCRIPTION
12.3 12.78 12.7	} -	MD#1	6/18		338	1		
10 MOJA 18/18 12/18 13/18 14/18			==			CL		SILTY CLAY; gray, moderately moist, soft, plastic to mod.
10 Moje 18/18	F = 1	MD#2	6/18		1,2,3	ļ		, and the second second second second second second second second second second second second second second se
10 MD 18/18	L 3 1	MD#3	12/18		1,1,1	ОН		SILTY CLAY/CLAY; gray, moist, soft, plastic, organic (weeds).
10 MD 18/18	F -					 		CLAY/SILTY CLAY: gray, wet, soft to very soft, sticky, low
No 18 / 18	F 1				İ	1		plasticity, few organics, strong organic odor.
UDJS 18/16 -15	-10-	MD44	18/18		<u> </u>	OL.		
-15- -20- -25- -30- -33- -45- -45- -50- -50- -60-	1 1		 -			1		
-25- -25- -30- -35- -45- -50- -50-	- -	MD#2	18/18		4,3,11		101010	Borehole abandoned 9 13 ft. No well installed.
-25- -25- -30- -35- -45- -50- -50-	L 15 J							
- 25	F"7					1		
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- 25	FI							
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	t 701							

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

	_		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	l or	ł		•	l	l	BORING NO. $W1-10(F)$
FEF.	196			z~^	호	ĺ.,	COORDINATES N. 342.552.4
ž	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	SYMBOL	PROFILE	FIELD ENGINEER E. Wessner E. 1,549,005.1
Į	¥ ¥			PER SE	83	18	EDITED BY J. Hadsall DATE BEGAN 7-7-88 CHECKED BY J. Hadsall DATE FINISHED 7-8-88
DEP TH	S ≺PE	i č		m "	SSS		CHECKED BY J. Hadsall DATE FINISHED 7-8-88 TOTAL DEPTH 19.5 ft. GROUND SURFACE EL. 7.3 ft.
	-					l	DESCRIPTION
L 0 1			12 Christy box			35.74	ASPHALT first 6".
	MD#1	6/18	8"x5" standpipe — 2	9/9/12			FILL: silty clay, light gray to brown, slightly moist, soft, non-
		ļ	Bentonite pellets		}	}	plastic with gravels. Shoe of sampler contained wire and cardboard.
- 5			3 to 5 feet —				and our desiration and and our desiration and our d
F 7		ļ			FILL		
+	MD#2	12/18	4" sch. 40 PVC	12/7/5	1	l	Color grades from gray/brown to gray, moisture content
10			casing ————————————————————————————————————				increases from slightly moist to wet at a depth of 7 ft.
1			4" .010 PVC	1			Trash, gravels and fibers throughout (cardboard, wood, plastic, concrete).
FI			screen from 7 to	1	i	ĺ	,
t ,,,				1			SILTY CLAY; gray to black, moist, soft,plastic, slight odor.
15	dup	12/18		2/3/4			lenses of organics mixed in.
t d	MD#3	12/18	Bentonite backfill	1/2/3	СН		▼ Water level at 17'4", 7-8-88, 09:00.
FF	MD#4	14/18	4 4 4 4 4 4	1/1/4			'SILTY CLAY-CLAY; gray, moist, soft, plastic, some lenses of organics.
20							TOTAL DEPTH 19.5 FEET
I - I			9.6"				(6" due to purging of hole with air for slug test)
l d							with dir for sing test)
25	[ĺ	
l							·
F 7	- 1						
30							
F 30 1							
t i	l	- 1					
\mathbf{F}						1	
L 35	j	J	J				
F 4	1						
t 1	1						
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L 70 L				1	1		

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

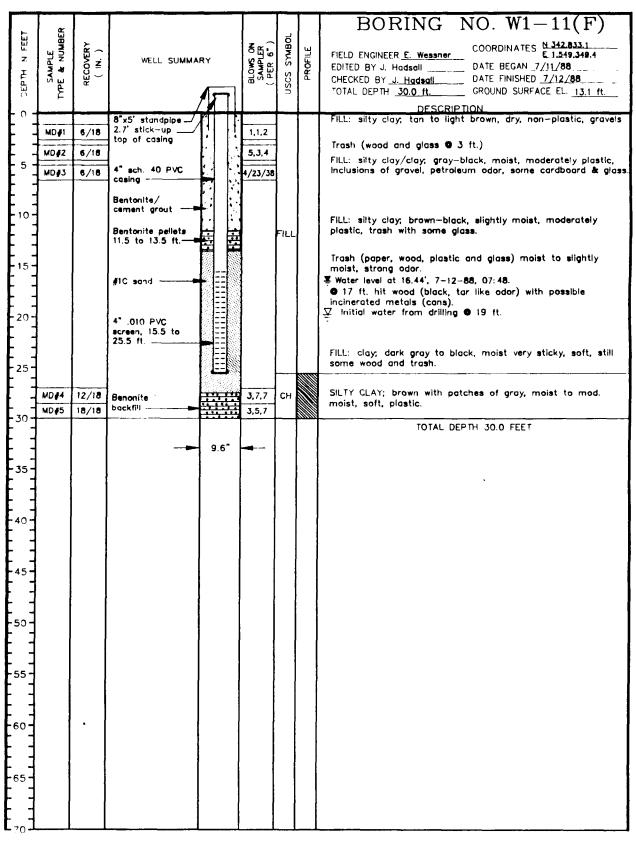
CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-W1-10.DWG

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... Creating a Safer Tomorrow

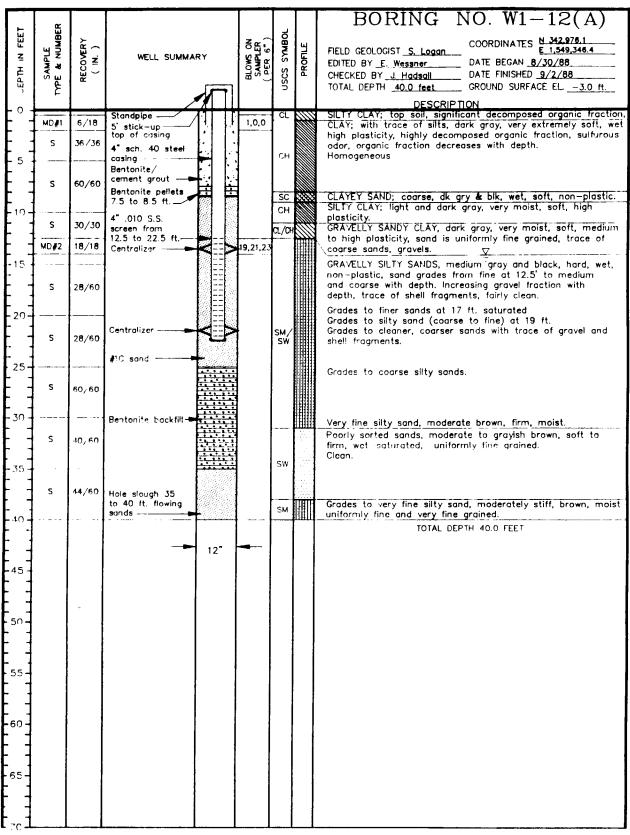


SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California ...Creating a Safer Tomorrow

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DRILLING CO.: Water Development Co. DRILLING METHOD: TR-4000 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

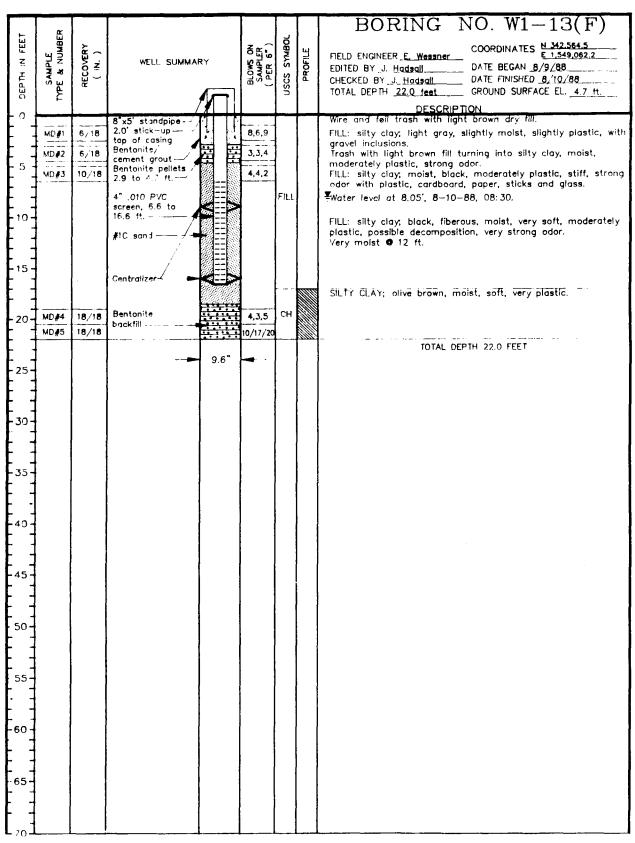
CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MFW1-12A.DWG

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...Creating a Safer Tomorrow



SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MEWI-13F,DWG

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.. Creating a Safer Tomorrow

				,			DODING NO SD1 1
	E E				بر ا		BORING NO. SB1-1
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	Ш	FIELD GEOLOGIST J. Hadsall COORDINATES N. 342.458.6
Z I	SAMPLE E & NU	o S ≧	WELL SUMMARY	OWS AMPI	SS	PROFILE	EDITED BY S. Bartling DATE BEGAN 7/15/88
ĒΡΉ	P. S.	æ.			∩SC	a.	CHECKED BY <u>J. Hadsqll</u> DATE FINISHED <u>7/15/88</u> TOTAL DEPTH <u>25 feet</u> GROUND SURFACE EL. <u>6.2 ft.</u>
	<i>(</i> -						DESCRIPTION
- 0 -							FILL: silty sandy gravel; gray brown with black mottling, dry, loose, subangular, 1/4 to 1/2" gravels.
t :	#1	36/60				1	in as, assumption, by the top of granted.
F -	·						
5 -							FILL: gravelly silty clay, varied color, brown, black, mottled red, stiff, grass roots and organic matter, no odor.
t :	#2	60,/60					
10				!	FILL		
F '~						l	
F 4	#3	60,′60					FILL: clayey silt; moist, soft, non-plastic, grass roots through out.
15				l			
F " -							FILL: clayey silt; dark gray, moist, soft, non-plastic.
F 7	#4	60,760					FILL: silty clay; gray brown, stiff, moist, moderate plasticity.
20							SILTY CLAY: brown with mottled gray, moist, stiff,
 							moderate plasticity.
F 3	# 5	60,′60			CL		
- 25 -					Ĺ		
L							TOTAL DEPTH 25 FEET 8 diameter boring
FF							· •
30							
1 1			`				
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35							
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-40		•					
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DRIFLING CO.: Water Development Co. DRIFLING METHOD: CHE 35 Hollow Stem Auger

SAMPLING METHODS: MD-California Modified 5-Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB1 -1(MF18)

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...Creating a Safer Tomorrow

				1			BORING NO. SB1-2
C LEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadsall EDITED BY S. Bortling CHECKED BY J. Hadsall TOTAL DEPTH 26.5 feet DESCRIPTION FILL: refuse and debris, (angular cobles, pebbles, silty sand,
	# 1	18/60					trash; bottle caps, plastic, etc.).
5 7 7 7 7	# 2	0/60					FILL: clay; black, very stiff, highly plastic, intermixed with refuse.
10 -	# 3	0/60			FILL		
15	#4	0/60					☑ Gound water first encountered. Hole abandoned 7-22-88, hit pocket of methane gas at 15 feet. Drilling resumed 7-25-88.
20	# 5	0/60					
25		0/18		18,20,28			Abandoned at 26.5 feet due to lack of recovery.
30							TOTAL DEPTH 26.5 FEET 8 diameter boring
40							
45							
50							
55							
60 -							
65-							
L ₇₀ d							

DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AUTOCAD FILE: 581 Z(MF18)

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... Creating a Safer Tomorrow

APPENDIX I

SECTION 2.0 - SITE 2 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

0.763.7 550,917.3 -88 7-88_ L. 0.4 ft. If, brittle.
58. 7-88. L. 0.4 ft. If, brittle.
-88 7-88_ L. <u>0.4 ft</u> . If, brittle. oarse, tone and
I. 0.4 ft.
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oarse, tone and
tone and
tone and
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slightly
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DRILLING CO.: Water Development Co.

DRILLING METHOD: Mud Rotary

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

	~						BORING NO. GB#1
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N. 340.763.7 E. 1.550.917.3 FIELD GEOLOGIS D.H. Cox FDITED BY F. Wessner DATE BEGAN 6-15-88 CHECKED BY J. Hodsall DATE FINISHED 6-17-88 TOTAL DEPTH 157.0 ft. GROUND SURFACE EL. 0.4 ft. DESCRIPTION
70 =	# 13	10/60					SANDY CLAY; gray brown, molst, moderately plastic, sticky.
75 -	# 14	3/60			CL		
80 -	p 15	20/60					
85 -	₽ 16	10/60		:	sc		CLÁYEY SAND; medium gray, moist, soft to stiff, slightly plastic.
97 -	#17	3/60					
- 25 -	# 18	24/60			CL		SANDY CLAY; gray, minor brown, moist, stiff, slightly plastic.
100	≱ 19	42/80			sc		CLAYEY SAND; gray—graybrown, moist to wet, stiff, slightly plastic.
105 -	#13 #20	21/60			CL		SANDY CLAY; gray—graybrown, moist—dry, stiff, slightly plastic.
110	# 21	33/60			sc		CLAYEY SAND; gray—graybrown, molst, soft, moderately plastic.
	: : <u>-</u> .						SANDY CLAY; medium—dark gray, bluegray, dry, stiff, non-plastic.
- 115 - - - -	#22	12/60					SILTY CLAY; medium—dark gray—blue gray, dry, stiff, non—plastic.
120	# 23	34/60					SILTY CLAY; light to medium gray, brown gray, moist, stiff, very sticky, slightly plastic.
125	\$24	19/60			CL		
130 -	₽ 25	43/60					
135	# 26	18/60					SILTY CLAY; dark gray, dry, very stiff, slightly to non-plastic.
E, 1	₽ 27	60/60					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB1.DWG

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...Creating a Safer Tomorrow

,		,			-		505010 110 GD //4
 _	œ						BORING NO. GB#1
DEPTH IN FEET	SAMPLE TYPE & NUMBER	Α.		MEASURED CONSISTENCY (TSF)	USCS SYMBOL	щ	COORDINATES N.340.763.7 . FIELD GEOLOGIS D.H. Cox
Z -	A PLE	RECOVERY (IN.)	WELL SUMMARY	ASUR SISTE	SΥ	PROFILE	EDITED BY F. Wessner DATE BEGAN 6-15-88
ā.	SA	REC		CONS	SCS	ď	CHECKED BY J. Hadsall DATE FINISHED 6-17-88
96	Ξ				⊃		
-141 -	***	22 /22				1111	DESCRIPTION SILTY CLAY; medium—dark gray—gray brown, dry, very stiff,
F 4	#27	60/60					slightly to non-plastic.
							SAND+ CLAY; medium—dark gray-gray brown, moderately
- 145 -	# 28	52/60					dry, stiff, slightly plastic.
$\mathbf{F} = \mathbf{F}$							
1 1	***	0 /00			CL		
- 150 -	# 29	0/60					
F 7		 					
1 1		!					
155 -	#30	38/60					
F					-		TOTAL DEPTH 157.0 FEET
F 7							4-1/2" diameter boring
- 160 -							
Ŀз							
F -							
165 -							
t 1							
F							
170							
<u> </u>							
-							
- 175 -							
F 7							
180							
F -							
- 1							
185							
F -							
F 7		,					
190							
t 1							
+ +							
105							
F 1							
<u>t</u> 1							
200							
F 7							
t 1							
205							
F 7							
<u>t</u> 1							;
$\mathbf{E}_{210}\mathbf{I}$		L		LJ		لـــا	<u></u>

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: HE GB1.DWG

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... Creating a Safer Tomorrow

		T			Γ		BORING NO. GB#2
FEET	SAMPLE TYPE & NUMBER	 -		ون	Ĭ		· · · · · · · · · · · · · · · · · · ·
<u>Z</u> .	SAMPLE E & NUN	RECOVERY	WELI. SUMMARY	MEASURED CONSISTENCY (TSF)	SYMBOL	PROFILE	FIELD GEOLOGIS D.H. Cox COORDINATES N.340,190.1 E1,550,859.7
DEP TH	SAME	AECC .		MEAS ONSIS	nscs	PRC	EDITED BY <u>E. Wessner</u>
)E	٤			Ō	sn		TOTAL DEPTH 157.0 ft. GROUND SURFACE EL. 2.1 ft.
- o -					-	1111	DESCRIPTION SANDY SILIY CLAY, dark gray-black, dry, stiff to hard.
‡ -	1						non-plastic.
ļ :	1]]			
- 5 -					ļ		
<u> </u>					1		GRAVELLY SANDY CLAY; dark gray—black, wet, soft, non— plastic with pebbles, angular gravels.
L ₁₀ :	#1	2/60		.25			produce with populars, dirigular gravers.
-	1						
F -	Ī						GRAVELLY SANDY CLAY; light medium brown-gray brown moist, stiff, slightly plastic, minor gravels.
- 15 -	# 2	8/60		1.5			moist, still, singitty plastic, millior gravers.
† -		·					SILTY CLAY; light medium brown-gray brown, moist, stiff,
<u> </u>							allghtly plastic.
20-	# 3	17/60		2.0			
-					1		SANDY CLAY; gray brown, moist to dry, stiff, slightly plastic.
-					CL		
- 25 -	#4	29/60		3.0			
ļ							
-30-	# 5	46/60		4.0			
<u> </u>							i
E d							SANDY CLAY; brown-gray brown, moist, stiff, slightly to non-plastic.
- 35 -	#6	15/60		4.0			
F 7	· ·						SANDY CLAY/SILTY CLAY; gray brown, pred. dry, stiff
1 1				2.0			non-plastic.
40 =	# 7	60/60		3.0 4.0			
<u> </u>			}				SILTY CLAY; medium gray brown, moist—dry, stiff, slightly
45-	# 8	38 /60		2.0 3.0			plastic.
<u> </u>				3.0			
F7					сн		CLAY—SILTY CLAY; medium gray, moist to wet, soft, very plastic.
50	₽ 9	20/60		.5			
ļ							CILTY CLAY, and down and the
<u> </u>				2.0			SILTY CLAY; medium gray brown, moist to dry, stiff, slightly plastic.
555	# 10	41/60		4.0 3.0			
F 7							
F 7					CL		
60	#11	40/60		2.5			
<u>t</u> †							SILTY CLAY; dark gray-gray brown, moist, stiff, moderately
65	# 12	10/60		1.5			plastic.
F°3-	- "				_		
F 7	#13	14/60	1 1	.5	сн		CLAY: medium gray—brown gray, moist, soft, moderately to very plastic.
t , , 1				1.5			vory prosection

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

					Г	Γ	BORING NO. GB#2
3 DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIS D.H. Cox EDITED BY E. Wessner CHECKED BY J. Hodsall TOTAL DEPTH 157.0 ft. DESCRIPTION COORDINATES N. 340,190.1 E. 1,550,859.7 DATE BEGAN 6-28-88 DATE FINISHED 6-29-88 GROUND SURFACE EL. 2.1 ft.
70	#13	14/60					
75	# 14	20/60		.5 1.0			SANDY CLAY; medium gray—gray brown, moist, soft to stiff, moderately plastic.
80	# 15	12/60		.5			SILTY CLAY; gray brown, moist, stiff, moderately plastic.
85	#16	35/60		1.5	CL		
90	# 17	15/60		1.0			
95	# 18	8/60		.25			
100	#19	12/60		1.0			
105	# 20	10/60		.5	sc		CLAYEY SAND-SANDY CLAY; gray brown, moist to wet, stiff, plastic. SILTY CLAY; medium brown, soft to moist, stiff, plastic.
110 -	# 21	21/60		1.0	сн		CEAT SILLY CLAY, medium gray, moist to dry, stiff to
-1"5	# 22	60/60		2.0 2.5			briftle, slightly plastic.
- 120 -	#23	56/60		2.5			SILTY CLAY; medium gray, moist to dry, stiff, slightly plastic.
- 125 -	# 24	60/60		2.5	CL		CLAY—SILTY CLAY; gray—brown gray, pred. dry, stiff, non-plastic.
	#25	34/60		1.0 1.25			
135	∦ 26	46/60		2.0 3.5			CLAY—SILTY CLAY; light medium gray, moist to dry, stiff, non—plastic.
E,,,,	#2 7	60/60		3.5 4.0			CLAY; medium-dark gray, pred. dry, stiff to hard, non- plastic.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB2.DWG

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...Creating a Safer Tomorrow

							
1,	ρc					1	BORING NO. GB#2
#:: [1] [1] [1]	NAPLE & YUNBER	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		MEASON CHAIR CONTRACT	CRABOL	hi	COORDINATES M. 340.190.1
	E & LUA	CLERY	WELL SUMMAR	S. S. E. S.	,	時時	PELD GLOCAGIS D.H. Cox E 1,550,859.7
JEP7-	T/PE 4	REC		F. F. Stock	SOSI	ů.	CHECKED BY J. Hadsall DATE FINISHED 6-29-88
, i	100				5		TOTAL DEPTH 157.0 ft GROUND SURFACE EL. 2.1 ft.
-1.:0 -	40.7	60/60			┿	1111	DESCRIPTION CLAY; medium-dark gray-gray brown, pred. dry, stiff to hard
F3	#27 · . 	60/60		2.5	-		non-plastic to slightly plastic.
1 4					CL		
-145 -	#28	49/60		2.5			
Łź					-		CLAYEY SAND; medium gray-brown gray, wet, soft, non- plastic to slightly plastic, fine to medium, subangular-
$\mathbf{F} \dashv$	*20	20 (00			sc		plastic to slightly plastic, fine to medium, subangular— subround, moderate—well sorted sand.
-150 -	#29	20/60		3.0			
t 1					┤		CLAY-SILTY CLAY, brown-gray brown, soft to stiff, moist,
├	#30	28/60		3.0	CL		slightly plastic.
-153 -	#35	20/00		3.0			
1 1				· · · · · · · · · · · · · · · · · · ·	-	222	TOTAL DEPTH 157.0 FEET
160							4~1/2" diameter boring
F							
F 7]		l J			
165 -							
<u> </u>						ļ	
F 4	- 1			1		İ	
170			ļ				
L 1	1	i I				1	
t d							
175							
‡ 7							
<u> </u>							
180				1		ĺ	
FF			,				
F 7	ł	1		1			
185]					
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FF		- 1					
190		}	J				
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F 32]	ĺ		ĺ				
F 1	j						
200	ł		ł				
F 7							
F 7			J				
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L 210 1							

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT 110.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

							BORING NO. GB#3
O DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WE LL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D.H. COX EDITED BY E. Wessner DATE BEGAN 6-24-88 CHECKED BY J. Hadsall DATE FINISHED 6-27-88 TOTAL DEPTH 243.0 ft. GROUND SURFACE EL 0.24
5 -					мн		SANDY LOAM; topsoil, medium brown, dry, soft to stiff non-plastic. 5 1/2" casing installed from 0 to 6.5 feet. 6.5'
		0/18		<u></u>			
101	#1	7/60		.5			SANDY CLAY; medium brown, wet, soft, moderately plastic with coarse sand and gravel fragments.
-15-	#2	8/60		1.0			Moisture content decreasing with depth. Color varies from medium brown to gray.
20-	#3	43/60		1.5	CL		Minor sand.
25-	#4	28/60		1.0	:		
-30-	# 5	9/60		1.0- 1.5	СН		GRAVELLY SANDY CLAY; medium brown, wet, soft, plastic with moderate to well rounded gravels (pred. dark gray siltstone, angular to round, poorly sorted).
- 35 -	#6	16/60		2.0	CL		SANDY CLAY: medium brown, moist, stiff, non-plastic to slightly plastic.
40	#7	12/60		1.0			
t			<u> </u>	<u> </u>	СН		SILTY CLAY; medium brown, moist, stiff, plastic.
45	#8	35/60		2.0			SANDY CLAY; gray brown, moist, stiff, slightly plastic.
50-	#9	31/60		1.0- 2.5			
55	#10	55/60		2.5	CL		SILTY CLAY; gray brown, dry to moist, stiff, slightly to non-plastic.
-60-	#11	48/60		1.0-			
65	#12	14/60		0.5- 1.0			SANDY CLAY; medium brown, dry to moist, soft to stiff, brittle, non-plastic.
E 70	#13	8/60		.5	СН		SANDY CLAY; gray brown, moist, soft, plastic.

SAMPLER:

5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB3.DWG

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...Creating a Safer Tomorrow

							BORING NO. GB#3
S DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASUNED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D.H. Cox EDITED BY <u>E. Wessner</u> CHECKED BY <u>J. Hodsgil</u> TOTAL DEPTH <u>243.0 ft.</u> DESCRIPTION COORDINATES <u>B. 341,038.2</u> <u>E. 1,550,380,7</u> DATE BEGAN <u>6-24-88</u> DATE FINISHED <u>6-27-88</u> GROUND SURFACE EL. <u>0.24</u>
70 -	# 13	8/60		.5			SANDY CLAY; gray brown, moist, soft, plastic.
75 -	#14	12/60		.5			
80 -	# 15	12/60		1.0	뀹		SH TV CLAV, madium to ded, and male to the control of
85 -	# 16	29/60		1.0- 1.5			SILTY CLAY; medium to dark gray, moist, soft, very plastic.
90	# 17	18/60		.5			
95	# 18	42/60		3.0- 3.5	ե		SILTY CLAY; gray to brown gray, dry, stiff, slightly plastic.
100	#19	16/60		.5	sc		CLAYEY SAND; medium brown to gray brown, moist, soft, non-plastic, fine, subangular, subround, moderate—well sorted sand.
105	#2 0	60/60		2.0	CL		SILTY CLAY; brown to gray brown, moist, stiff, moderately plastic. SANDY CLAY-CLAYEY SAND; light to medium gray, moist,
-110	#21	48/60		3.0- 4.5	3		stiff, non-plastic.
115	#22	0/60			sc		SAND; fine to medium, subangular—subround, moderate to well sorted quartz.
120	, #23	60/60		1.0	려		CLAY-SILTY CLAY; dark gray, moist to dry, stiff, plastic. SANDY CLAY-CLAYEY SAND; dark gray, moist, stiff to soft,
-125	#24	34/60		1.5	CL		non—plastic to slightly plastic, minor shell fragments.
130	#25	24/60		2.0- 2.5			CLAY—SILTY CLAY; dark gray, moist to dry, stiff, slightly to non-plastic, minor shell fragments. SILTY CLAY—CLAY; dark gray, moderately dry, stiff, slightly
135	#26	60/60		2.0	СL		to non-plastic.
$[E_{140}]$	# 27	60/60		2.5			SILTY CLAY; gray to brown gray, moderately dry, stiff, slightly plastic.

SAMPLER:

5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB3.DWG

PAGE 2 OF 4



...Creating a Safer Tomorrow

	Γ					П	POPING NO CD//2
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USC\$ SYMBOL	PROFILE	BORING NO. GB#3 FIELD GEOLOGIST D.H. Cox EDITED BY _E. Wessner
140-	# 27	60/60		2.5			SLTY CLAY; brown to gray brown; moderately dry, stiff; non-plastic to slightly plastic.
145	# 28	40/60		2.0- 2.5			
150	# 29	38/60		1.5- 2.5			CILTY CLAY, dad and a shift
155	#3 0	53/60		2.5	CL		SILTY CLAY; dark gray, dry, stiff, non-plastic.
160	₫3 1	60/60		2.0– 2.5			SILTY CLAY; light to medium gray, moist, stiff, slightly plastic.
165	4 32	50/60		2.5			
170	#33	53/60		2.5	СН		SANDY—SILTY CLAY; dark gray, moist, stiff, plastic, trace shell fragments.
175	# 34	24/30		2.0			SILTY CLAY; medium gray, dry to molst, stiff, slightly plastic.
180	# 35	32/60		2.5			
185	# 36	58/60		3.5			
190	#37	40/60		2.5	CL		SILTY CLAY; light to medium brown, dry, stiff, non-plastic,
195	#38	40/60		4.0			
200	#39	60/60		3.0			
205	#4 0	32/60		3.5			SILTY CLAY; light gray to gray brown, dry, stiff, non-plastic. GRAVELLY SILTY CLAY-SANDY CLAY; gray brown, moist to dry, stiff, slightly plastic with gravel, pred. coarse angular
E ₂₁₀	# 41	11/60		2.5			siltstone fragments.

SAMPLER:

5' Core Barrel Wireline Sampler

...Creating a Safer Tomorrow

PAGE 3 OF 4

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409616 LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB3.DWG

							BORING NO. GB#3
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D.H. Cox EDITED BY <u>F. Wessner</u> CHECKED BY <u>J. Hadsqli</u> TOTAL DEPTH <u>243.0 ft.</u> DESCRIPTION COORDINATES N341038.2 E1550.380.7 DATE BEGAN 6-24-88 ETNISHED 6-27-88 GROUND SURFACE EL. 0.24
210	# 41	11/60		2.5			GRAVELLY SILTY CLAY—SANDY CLAY; gray brown, dry to moist, stiff, slightly plastic with gravel, pred. coarse angular siltstone fragments.
215	#4 2	31/60		2.0			SILTY CLAY; dark gray, moist, soft to stiff, moderately plastic.
220	# 43	44/60		2.5- 3.5	,		
-225-	\$44	58/60		3.0	CL		
230	# 45	29/60		1.5			SANDY CLAY; gray brown, moist, soft to stiff, slightly plastic.
235	#46	40/60	·	3.5— 4.0			SILTY CLAY; dark gray, dry, stiff, slightly to non-plastic.
240-	#47	58/60		4.5			GRAVELLY SANDY CLAY; light to medium gray to brown gray, moist to dry, stiff, slightly to non-plastic, coarse sand and gravel
-245							TOTAL DEPTH 243.0 FEET 4-1/2' diameter boring

SAMPLER:

5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

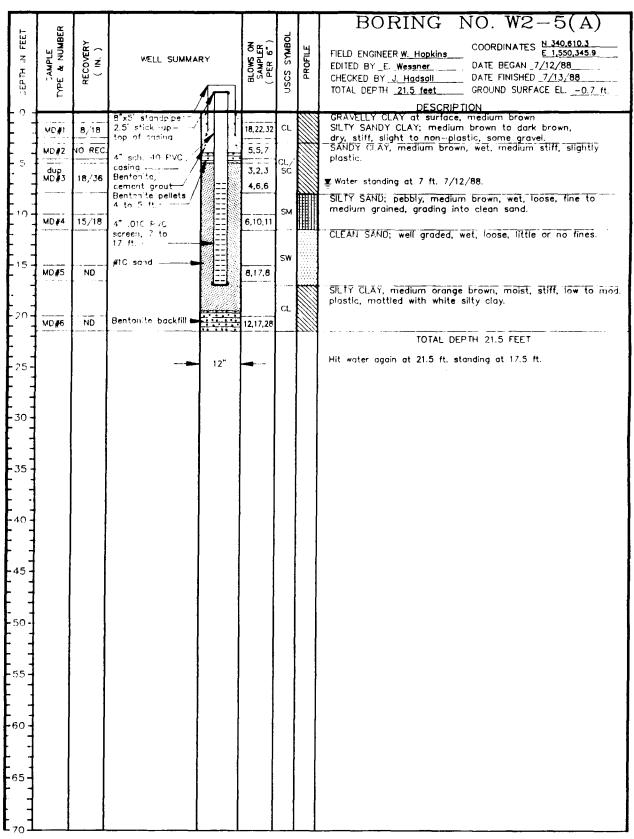
LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB3.DWG

PAGE 4 OF 4



... Creating a Safer Tomorrow



DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

FROJECT NO.: 409616

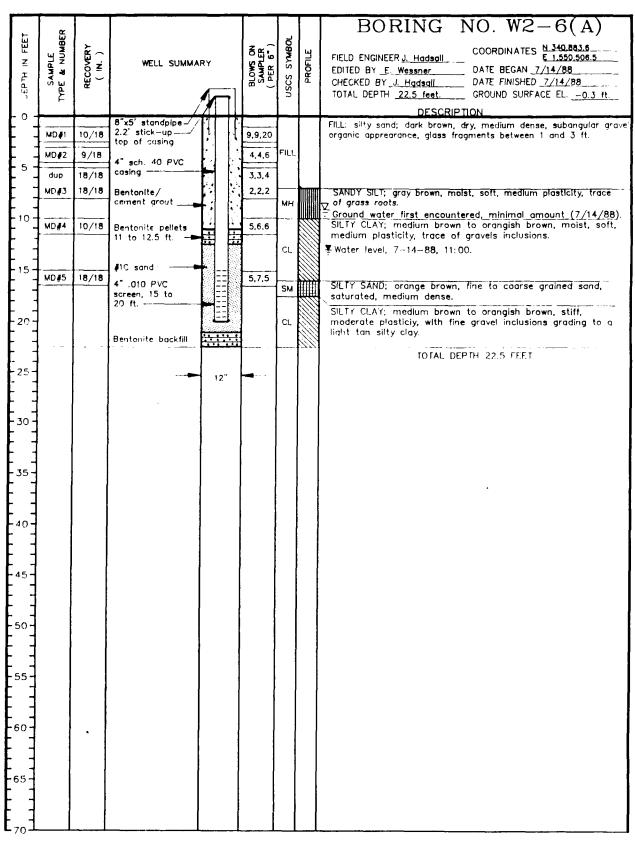
CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF--W2-5A.DWG

PAGE 1 OF 1



... Creating a Safer Tomorrow



DRILLING CO.: Water Development Co.
DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO .: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-W2-EA.DWG

PAGE 1 OF 1



...Creating a Safer Tomorrow

-	Y	7			T		DODING NO MO
1 _	عو ا	}]		ļ	BORING NO. $\overline{W2}-7(A)$
FEET	SAMPLE TYPE & NUMBER	≿ _		zα.	1	١.,,	COORDINATES N 340,756.6 FIELD ENGINEER J. Hadsoil E 1,550,917.8
7.	P.E.	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	JSCS	PROFILE	
Æ	¥ 4			PEN PE	SZ	18	FDITED BY S. Logan DATE BEGAN 7-6-88 CHECKED BY J. Hadsall DATE FINISHED 7-7-88
DEP TH	° ₩	₹		[@] ~ ~	İ		TOTAL DEPTH 40 ft. GROUND SURFACE EL. 0.6 ft.
1 "	-		17		ļ		DESCRIPTION
_E ? =		1	8 x5 · standpipe — .	<u> </u>	╅	1111	SANDY CLAY; medium to dark brown, dry, stiff, brittle
F -	MD#1	10/18	2.09' stick-up-	17,9.8			with some gravel.
<u> </u>	MD#2	11/18	Bentonite/	6,12,23	CL		
-5-		t	cement grout		1		Majahana at 5 feet
h -	MD#3	14/18	4" sch.40 PVC	4,7,9			Moistens at 5 feet.
F -	MD#4	15/18	casing —	4,4,4			CLAYEY SANDY SILT; medium brown, wet, soft,
10-					MI.		fine grained sand.
F "-	MD#5	12/18		8,12,15			
E I	_				 		SANDY SILTY CLAY; medium brown, moist, stiff, slightly
 	s	42/42					plastic.
- 15 -							₹ Water level at 15', 7-7-88, 08:00.
	s						Isolated areas of different hued browns.
t i	5	60/60					
-80-		 					
1 3					_		
F 3	5	60/60			Cl.		
F		[
- 25 -			Bentonite pellets				5 (
1 1	S	60/60	26 to 28 ft. — 📥				Trace of fine sands (with depth).
F 7		00,00	4" .010 PVC screen, 30 to				SANDY CLAY with gravel (10%); medium brown, moist, stiff.
-30-	MD#6	12/18	35 ft	5,6,6			
		12/10		3,0,0			
\mathbf{h}	s	42/42	Centralizer		SM-	HIII	SILTY SAND; medium brown, loose, saturated. SAND; gray brown, saturated, loose, medium/cogrse grained
35				1	GW		w/ pebbles & gravel, subrounded gravels, subrounded
F 4			#1C sand	ĺ			to angular quartz in sand.
	s	60/60	Bentonite		CL.		SANDY CLAY; medium brown, moist, stiff, slightly plastic.
- 10			backfill	ļ	ļ		
		Ī		Ī			TOTAL DEPTH 40 FEET
h -1			= 12"			İ	
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DRILLING CO.: Water Development Co.
DRILLING METHOD: Hollow - Stem Auger-CME 55

PROJECT NO. 409616

LOCATION: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-W27A,DWG

PAGE 1 OF 1



... Creating a Safer Tomorrow

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						BORING NO. W2-8(FILL)
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Ţ	54145 24 = 2		DECEMBER OF THE STATE OF THE ST		Ona	FIGURE BY 1, Hadeall PATE BEGAN 6/29, 88 CHECKED BY 1, Hadeall PATE FINISHED 6/30/88
ď	عاد 14pe	ά	4 5 1" 5	SOSD		101 N DEFTH 15.25 feet GROUND SUPFACE EL. 3.1 ft.
1	1-		/ // / / / / / / / / / / / / / / / / /			DESCRIPTION .
1 1			8' x5 standpipe = /			FILL: 51ty clay, dark gray, dry, stiff, non-plastic, aroular aravet fill.
	M[:#1 	8,16	top of nasing	1		များမှုတ်သုံး ရှားသူများ ကေး
1 -			Bentonite, cement grout -/			
<u> </u>	M5#2	3, 16	Bentonde celleto - 19,7,5	1.43		Filts: city clay; reddish brown, dry, non-plastic, metal
-			1" sch. 10 F/C	1		glass and garbage, some silt gravels.
	1		Casir g			FILL: clayey silt; black, slightly meist, non plastic, garbage
	1		#* .01/1 F /C			FILL: silty sandy clay; tan, moist, soft, moderately plastic, Forganics and gravels, some lead and metals.
			screen, to	.	~~~	SIT'S CLAY, fair to brown, moist, soft, plastic, some fair
L 1	MD#₹	12/16	#10 could - 3,5,5	GH		brown alternation, some inclusions of gravel siltstone.
[]	MD#4	12,16	Benton te haskfill	-	247	Material material.
t :	İ		9.6			TOTAL DEFINE 15.25 FEET
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DRIFTING CO.; Water Development Co. ORIFTING METHOD: Air Retary

SAMPLING METHODS: MD=California Modified S\(\sigma \) Split Barrel

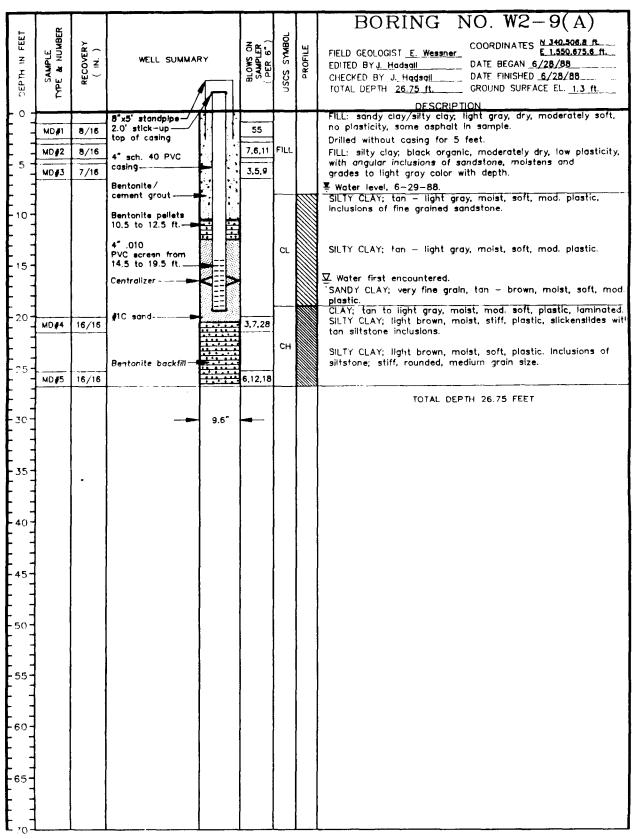
PROJECT 110.: 409616

CURRET March Ca Station teffett Field, California

PAGE 1 OF E



...Creating a Safer Tomorrow



SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



... Creating a Safer Tomorrow

	,				_	,	
	g	ļ			١.]	BORING NO. $W2-10(F)$
FEE T	SAMPLE TYPE & HUMBER	à .		Z K.	SYMBOL	ш	COORDINATES N 340,872,7 FIELD ENGINEER E. Wessner
7	19 E	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	S	PPOFILE	FIELD FNGINEER E. Wessner FDITED B. J. Hadsall PATE BEGAN 7/12/88
다 구	N AN	ZEC:	9"E' at an daine a	SABLO	USCS	ă	CHECKED BY J. Hadsall DATE FINISHED 7/13/88
) EI	₹.		8"x5' standpipe 1.8' stick-up		Sn		TOTAL DEPTH 16.0 feet GROUND SURFACE EL. 1.1 ft.
- 0 -			top of casing	<u> </u>	ļ	_	DESCRIPTION
<u>t</u> :	MD#1	12/18	4" sch. 40 PVC casing	12,20,30		}	FILL: silty clay, brown to light gray, dry, hard, non-plastic, gravel.
-	MD#2	12/18	Bentonite/	12,15,10			FILL: playey silt; brown to light gray, dry, non-plastic, trach
[,]			Bentonite pellets 3 to 5 ft.		.	ľ	(glass, metal), grades to dark brown, slightly moist.
t :	MD#3	12/18	4" .010 PVC ===================================	7,2,7	FILI.		FILL: silty clay, reddish brown, moist, non-plastic, gravels, iron oxide stains, trash (wire, glass, metal).
- -			11 ft	1			₹Water level at 7.16', 7-12-88, 07:50. FILL: clayey silt; dark brown, moist, moderately plastic, glass,
10			Centrolizer				gravel — metal inclusions, tar, petroleum odor.
L :			#iC sand		 -		SILTY CLAY; reddish brown with gray areas, moist, soft,
F -	MD#4	12/18	Bentonite trackfill	46.0	СН		plastic, inclusions of gravels. (Notural)
154	MC#5	18/18	Delitorate Criskini	4,6,10 7, 5 ,10	Ŭ,		(notal di)
+ -	410,70	10/10	7	7,3,10			
FF			9.6"				TOTAL DEPTH 16.0 FEET
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DRILLING CO.: Water Developement Co.

DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified

S=Split Barrel

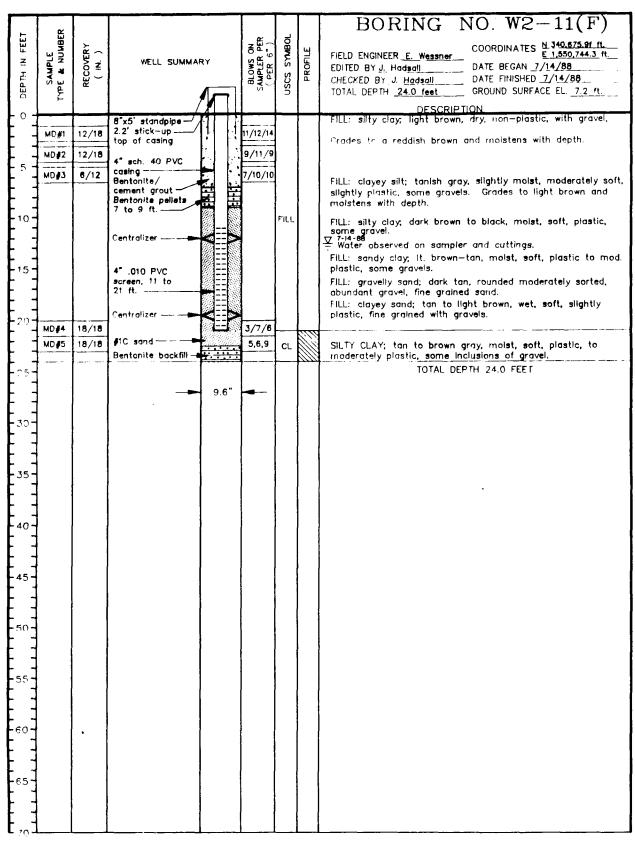
PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MFW2-10F.DWG

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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILF: WFW2-11F.DWG

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...Creating a Safer Tomorrow

		,	 			,	DODUIG NO GRO
	ρĸ				١.		BORING NO. SB2-1
FEET	SAMPLE	<u>ک</u> ر ر		Z % ()	USCS SYMBOL	Щ	FIELD GEOLOGIST J. Hadsall COORDINATES N. 340.550 E 1,550,880
로	P. S.	RECOVERY (IN.)	WELL SUMMARY	SAMPLER (PER 6")	S.	PROFILE	FIELD GEOLOGIST J. Hadsail EDITED BY S. Bartling DATE BEGAN 8/1/88
EP TH	S. A.	. Ag		SAI SAI	SS	ď	CHECKED BY J. Hadsall DATE FINISHED 8/1/88
<u> </u>	, ₹				Š		TOTAL DEPTH 25 feet GROUND SURFACE EL.
- 0 -						,,,,,	DESCRIPTION
t i							SANDY SILTY CLAY; light gray, mottled orange oxidation, dry, moderately soft, non-plastic.
F 3	#1	36/60					SILTY CLAY; black, dry, non-plastic, brittle, grass roots.
5 1					CL		
1							SILTY CLAY; light graytan, moist, moderate plasticity with sandstone inclusions.
F -	#2	60/60			ин.		CLAYEY SANDY SILT. too wet elight plasticity
10					_ ''''.		CLAYEY SANDY SILT; tan, wet, slight plasticity. SILTY CLAY; tan, moist, medium stiff, moderate plasticity.
Łż					CL		
F7	#3	60/ 60		1	мн		SANDY SILT; tan, wet.
15							SILTY CLAY; tan, moist, medium stiff, moderate pisticity.
+ +				l			SILTY CLAY; tan, moist, soft, moderate to low plasticity,
F 1	#4	60/60					highly fractured with some water in fractures.
20 1					CL		SILTY CLAY; tan, slightly moist, stiff, moderate plasticity.
F., 4							SILTY CLAY; light brown, moist, stiff, fractured zones with
1 1	# 5	60/60					sandstone inclusions.
25				ł			
[~]						77.77	TOTAL DEPTH 25 FEET
<u> </u>		1		Į			8" diameter boring
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DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB2-1(MF21)



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...Creating a Safer Tomorrow

BORING LOGS OF SITE 3 WELLS WILL BE INCLUDED IN FUTURE REPORTS

BORING LOGS OF SITE 4 WELLS WILL BE INCLUDED IN FUTURE REPORTS

APPENDIX I

SECTION 5.0 - SITE 5 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

							BORING NO. GB-21
DEPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	SOSC	PROFILE	FIELD ENGINEER J. Hodgoll EDITED BY D.H. Cox DATE BEGAN 8/23/88 CHECKED BY J. Hodgoll DATE FINISHED 8/23/88 TOTAL DEPTH 232 ft. GROUND SURFACE EL. 6.8 ft. DESCRIPTION
. 0 -							SANDY CLAY; medium brown, moist, stiff, grass roots and gravel.
- 10 -	#1	4/60					SANDY CLAY; medium/dark brown, moist, very stiff, moderate plasticity, some gravel.
-15	#2	6/60			CL		SANDY CLAY; medium brown, moist, stiff, moderate
- 20 - - 25 -	#3	20/60 36/60					plasticity, mudstone fragments.
F 1			.				
-30	# 5	10/60					SANDY CLAYEY GRAVEL; medium brown, moist, stiff, moderate plasticity, 50% gravel, 10% sand. Gravel from shaker.
- 35 -	#6	0/60			GC		 No recovery Angular gravels 1/8-1/2" clasts, clert and mudstone. Drill bit is grinding on gravels.
40 -	# 7	n/60					
45	#8	20/60					
[°]							SANDY CLAY; medium tan brown, moist, very stiff, moderate plasticity, mudstone fragments.
- - 50 -	#9	6/60					SANDY SILTY CLAY; medium tan brown, moist, very stiff, moderate plasticity, medstone fragments and grass roots.
-55	#10	32/60			CL/		SILTY CLAY; medium/dark brown, moist, very stiff, high plasticity.
-60	#11	4/60			СН		
-65.	#12	30/60					SANDY SILTY CLAY; medium brown, moist, stiff, moderate—high plasticity.
E .1	#13	5,/60					SILTY CLAY; medium brown, moist, stiff, moderate—high plasticity, mudstone fragments.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF - GB21.DWG

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...Creating a Safer Tomorrow

				1			BORING NO. GB-21
S SEPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	SOSC	PROFILE	FIELD ENGINEER J. Hadsall EDITED BY D.H. Cox DATE BEGAN 8/23/88 CHECKED BY J. Hadsall DATE FINISHED 8/23/88 TOTAL DEPTH 232 ft. GROUND SURFACE EL 6.8 ft. DESCRIPTION
70 1	#13	5/60					
75 -	#14	24/60			СН		SILTY CLAY; medium brown, moist, stiff, high plasticity.
- 80 -	# 15	0/60					No Recovery Fine grained sand and slit coming from the shaker.
85 -	# 16	0/60			,		
90 -	# 17	0/60					
95 -	# 18	22/60					SILTY CLAY; medium brown, soft, moist, sticky.
100	# 19	12/60			СН		SILTY CLAY; medium brown, moist, very stiff, high plasticity.
-105 -	# 20	6/60					SILTY CLAY; medium brown, moist, stiff, high plasticity.
-110	#21	2/60					SILTY CLAY; medium brown, soft, moist, sticky.
115	#22	0/60					No Recovery
120	#23	0/60				muo	
-125-	#24	10/60			СН		SILTY CLAY; gray brown, moist, stiff, very plastic.
-130	#25	0/60					No Recovery
- 135	#26 	30/60			сн		SILTY CLAY; gray brown, moist, very stiff, very plastic.
E,40 =	#27	44/60					

DRILLING CO.: Water Developement Co.

DRILLING METHOD: Mud Rotary

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB21.DWG

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...Creating a Safer Tomorrow

	<u> </u>						BORING NO. GB-21
FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)		₹₩.		ш	COORDINATES N. 338,458.4
<u>z</u>	SAMPLE E & NUL	ŘECO N.	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	SSCS	PROFILE	EDITED BY D.H. Cox DATE BEGAN 8/23/88
DEP TH	YPE SA	RIVE.		SAME		ă	CHECKED BY J. Hodsoil DATE FINISHED <u>8/23/88</u> TOTAL DEPTH <u>232 ft.</u> GROUND SURFACE EL. <u>6.8 ft.</u>
-140-	_	ā					DESCRIPTION
	#27	44/60					SITLY CLAY; medium brown, mottled gray, moist, very stiff, very plastic.
t :	#28	60/60	ļ		СН		
-145 -	#26	80/80		1			
F =			1		CL		SILTY SANDY CLAY; medium brown, mottled gray, moist, very stiff, moderate plasticity.
150	#29	54/60					SILTY SAND; medium brown, moist, medium dense.
\mathbf{E}		 	1		CH		SANDY SILTY CLAY; medium brown, moist, stiff, very plastic.
155 -	#30	40/60			SM		SILTY SAND; medium brown, moist, loose.
† ‡							
-	#31	0/60					No recovery
160	<i>"</i> ~·	0,00	Ì				
F 3			J				SILTY CLAY; medium brown gray, molst, very stiff, highly plastic.
165	#32	48/60			СН		
E 3			.				
170	#33	12/60		1	СР		GRAVEL; large angular clasts, 1"-2" in length.
‡ ‡							No recovery: Probably gravels (inferred from bit behavior).
	#34	0/60					
-175	,,	,,					
E 3							Losing water to formation, probably still in gravels.
180	#35	0/60					Split gravels (1/4" inch, angular from shaker.
┠ ┪							
185	# 36	0/60		ĺ			
‡ ‡							
† †	#37	0/60			ĺ		(
190	<u>. </u>				ļ		
E 3							
195-	#38	0/60			į		J
 							
200	#39	0/60					No recovery: appears to be fine gravet and coarse sand,
F ‡							(from shaker).
F	#40	0/60					
205							
$E = \frac{1}{2}$	#41	0/60			1		
	لـــــــــــــــــــــــــــــــــــــ				\perp	l	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB21.DWG

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...Creating a Safer Tomorrow

1		,	<u></u>			,	
	95	E					BORING NO. GB-21
EPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY		BLOWS ON SAMPLER PER (PER 6")		Щ	FIELD ENGINEER J. Hadsall COORDINATES N. 338.458.4
ž	1 4 N	Z Z	WELL SUMMARY	R ER	SOSO	PROFILE	FIELD ENGINEER J. Hadagii EDITED BY D.H. Cox DATE BEGAN 8/23/88
F F	, γ _γ	- W		BLG PE	ב	æ	CHECKED BY J. Hodsall DATE FINISHED 8/23/88
. E	\$	OR		o l			TOTAL DEPTH 232 ft. GROUND SURFACE EL. 6.8 ft.
210 -		}				-	DESCRIPTION No recovery: appears to be coarse sand and angular
	#41	0/60					gravels, (shaker). SILTY CLAY; tan brown, moist, very stiff, moderate
t :							SILTY CLAY; tan brown, moist, very stiff, moderate plasticity.
- 215 -	#42	60/60			CL		
F 7		ļ					
t d		ł					No recovery: bit behavior indicates gravel.
220-	#43	0/60				l	
F 7		}		ļ			
t d				ĺ			SILTY CLAY; gray green, molst, stiff, plastic.
-225-	#44	28/60		Ì			
F 7		l		ł	СН		
Łз				1	• • •		
-230-	#45	60/60		ļ			
! 1							
Ŀз							TOTAL DEPTH 232 FEET 4-1/2" dlameter boring
-235-	#46	0/60		ľ			4 1/2 didinate balling
t 1							
ŁЫ	#47	0/60					
240							
1					j		
ŁЫ					- [
-245-							
F 7				ł	- 1	ł	
Ŀз							
250							j.
F 1					1		
ŁЬ					1		
255					- 1	ĺ	1
t 1						ļ	
t d		.				ł	1
260-						ı	
F 7		- 1		-		J	ļ
t 1				}			
265	1						ŧ
F 7	1	ľ					1
t 1							
270		1					!
F 7							i
<u> </u>							I
275							1
275	- 1					- 1	I
280	Ì	ł			1	- 1	
L ₂₈₀ _L				<u> </u>	\perp		

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB21.DWG

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...Creating a Safer Tomorrow

	~	>					BORING NO. GB-22
DEPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	SOSO	PROFILE	FIELD ENGINEER D.H. Cox FIELD ENGINEER D.H. Cox FDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 248 ft. GROUND SURFACE EL. 12.78 ft. DESCRIPTION
							CLAY—SILTY GLAY; light brown, dry, non—plastic, hard.
1 5 -					OL		CLAY; dark gray-black, dry-slightly moist, stiff, hard, slightly plastic.
10	#1	9/60					SANDY CLAY; light—medium gray brown, stiff, wet, slightly plastic.
15 -	#2	28/50					
20 -	#3	22/60					SANDY CLAY; medium brown—dark brown, moist, very stiff, slightly plastic, abundant coarse sand, subangular—rounded, moderately—well sorted, quartz & milky quartz with angular gravel, predominantly siltstone & sandstone, medium dark brown—dark brown, chert fragments.
25 -	#1	0/60					
-30		0/60					
35	# 5	54/60					SANDY CLAY; gray brown, very stiff, moist, slight-moderate plasticity, with coarse sand and gravel associated.
40	# 6	60,/60			CL		SILTY CLAY; light—medium gray, moist, very stiff, moderate plasticity. SANDY CLAY; blue gray— brown gray, moist—dry, stiff—hard, slightly—non—plastic.
1 1							CUIV CLAV
45-	#7	23,′60					SILTY CLAY; minor sand, gray brown, predominantly dry, very stiff, slightly to non-plastic.
50	#A	35, 60					
- 55 -	# 9	19/60					
60	#10 	17,′60					SANDY CLAY; medium gray, brown gray, moist, very stiff, slight plasticity.
65	#11	7, 60					
$E_{70}I$	#12	15, 60			_		

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.. 409616 CLIENT, Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

					<u> </u>		BORING NO. GB-22
3 DEPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	SOSFI	PROFILE	FIELD ENGINEER D.H. Cox EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 248 ft. DESCRIPTION COORDINATES N. 337.159.6 E 1.553.394.6 E 1.553.394.6 DATE BEGAN 6/30/88 CROUND SURFACE EL. 12.78 ft. DESCRIPTION
	#12	15/60			CL		SILTY CLAY; minor sand, medium brown gray brown, moist, very stiff, slight plasticity. CLAY-SILTY CLAY; medium brown, moist, very stiff, plastic.
75 -	#13	20/60			сн		
80 -	# 14	26/60					SILTY CLAY; gray brown, firm, moist, slight plasticity.
- 95 -	# 15	55/60					SILTE GLAT, gruy brown, min, most, singitt prostierty.
50	#16	16/60					SANDY CLAY; medium gray, moist—wet, soft—stiff, slight
25.4							plasticity. SILTY CLAY—SANDY CLAY; stiff, moist, slight plasticity.
	#17	27/60					SILTY CLAY; gray brown, moist, very stiff, slight plasticity
-100 -	#18	32/60					
-105 -	#19	27/60					CLAY; dark brown, predominantly dry, very stiff, non-plastic.
110 -	# 20	60/60			CL		CLAT, dark brown, predominantly dry, very still, non-plastic.
115	#21	20/60					
120	#22	60/60					SILTY CLAY; medium gray, moist, very stiff, slight to moderate plasticity.
125	#23	60/60					
130 -	#24	60/60					CLAY; medium—dark gray, slightly moist — dry, very stiff, slight to non-plastic.
135	# 25	60/60					
L.40 1	#26	60/60					

DRILLING CO.: Water Developement Co.

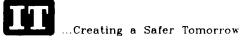
DRILLING METHOD: Mud Rotary

SAMPLING METHODS: MD=California Modified

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

S=Split Barrel



SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AULICAD FILE: 00WG

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							BORING NO. GB-22
TO SEPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6)	SOSC	PROFILE	FIELD ENGINEER D.H. COX EDITED BY J. Hadsail DATE BEGAN 6/30/88 CHECKED BY J. Hadsail DATE FINISHED 7/5/88 TOTAL DEPTH 248 ft. GROUND SURFACE EL. 12.78 ft. DESCRIPTION
[]	# 28	60, 60			a.		Consistency increases to hard.
\mathbf{F}				j			CLAYE'r SAND; medium gray-brown gray, moist-wet, stiff,
-145 -	#27	20/60			80		slight plasticity.
150 -	# 28	43/60					CLAY-SILTY CLAY; medium gray-blue gray, predominantly dry, very stiff, slight to non-plastic.
155	/ 29	60/60			CL		
-160	# 30	22/60					
165		0/60					Na recovery
170 -	#3 1	4/60			GC		CLAYEY GRAVEL; pebbles, angular fragments.
175	#32	4/60					SANDY CLAY; medium—dark gray—blue gray, moist, stiff, slight plasticity with pebbles and angular fragments.
- 180 - - 180 - 	# 33	43/60					SILTY CLAY; medium gray blue gray, predominantly dry, slight plasticity.
185		0/60					
190	# 34	30/60			CI.		SANDY CLAY; medium—dark gray-blue gray, moist, very stiff
195	# 35	60/60					hard, siight plasticity, grading to clayey sand.
200	# 36	58/60					
205	#37	20,/60					Consistency decreases to stiff—very stiff.
E = 1	/ 38	45/60					CLAYSILTY CLAY; dark gray blue gray, moist, very stiff, slight plasticity.

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: 0.DWG

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...Creating a Safer Tomorrow

			₇			_	
	ρĸ	E			1		BORING NO. GB-22
JEPTH IN FEET	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY ('N.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	SOSO	PROFILE	COORDINATES N. 337.159.6 E 1.553.394.6 FIELD ENGINEER D.H. Cox EDITED BY J. Hadsall DATE BEGAN 6/30/88 CHECKED BY J. Hadsall DATE FINISHED 7/5/88 TOTAL DEPTH 248 ft. GROUND SURFACE EL. 12.78 ft. DESCRIPTION
210		50 (00			CL		CLAY-SILTY CLAY; dark gray-blue gray, moist, very stiff,
1 1	#78 	58/60					slight plasticity. CLAYEY SAND; dark gray, moist, stiff-very stiff, non-plastic,
215	#39	45/60			SC		very fine—fine, well sorted, subangular—subrounded, grading to sandy clay.
F7							SANDY CLAY: dark gray, very stiff, moist—wet, slight to non—plastic.
-220	#40	60/60					
225] /a					
F = 1	#41	33/60					
! :					CL		
230	#42	53/60					
Ŀ́з							Color grades to light-medium gray.
F}				}			
235	#43	47/60					Color grades to medium brown—gray brown.
F 1		 					
240							CLAYEY SAND—SANDY CLAY; medium brown, moist, very stiff- hard, non—plastic.
	#44	48/60			sc		
F 7							SANDY CLAY; light-medium gray brown, moist, very stiff,
245		- (0.0			CL.		non - plastic.
‡ ‡	#45	7/60			UL.		,
!							TOTAL DEPTH 248 FEET
-250-				ŀ			4-1/2" diameter boring
F			:	ŀ			
F 7							
255							
t d	ł			ļ			
<u> </u>							
260							
F 7							
265		l					
t 1		ĺ	[[i
ĿℲ							ļ
270	ĺ	.		1			
F 7							
‡ ‡	l				}	- 1	l
275	ļ				Ì		
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F	i						
- 280 - - -				i		!	

SAMPLING METHODS: MD=California Modified

S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: O.DWG

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... Creating a Safer Tomorrow

							BORING NO. GB-23
15	F.3	λ E		œ			
DEPTH IN FEE	SAMPLE TYPE & NUMBER	DRIVE/RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	SOSC	PROFILE	FIELD ENGINEER D.H. Cox EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 252 ft. COORDINATES N. 336.115.1 E 1.553,062.2 DATE BEGAN 8/16/88 DATE FINISHED 8/12/88 GROUND SURFACE EL. 13.76 ft.
- 0 -						Н	DESCRIPTION Asphalt
11111							SANDY GRAVELLY CLAY; dark gray-black, predominantly dry, stiff, slight to non-plastic.
101					CL		SANDY CLAY; dark gray—brown, moist, stiff, slight—moderate plasticity.
15	#1	2/60		į			
100	#2	0/60			GC		CLAYEY GRAVEL; medium to coarse, subangular to round, clay, light to medium brown, wet, soft, (logged from shaker).
	#3	9/60			-		SILTY CLAY; medium brown, minor gray, moist, stiff, slight—moderate plasticity.
30	#4	16/60			CL		SILTY CLAY; moderate yellowish brown, predominantly dry-
- 75 - 75	#5	21/60					moist, moderate plasticity.
40	#6	0/60					
45-	#7	25/60			CL		CLAY—SILTY CLAY; medium brown (yellow brown), moist, stiff, moderate plasticity.
	#8	27/60			сн		SANDY CLAY; moderate—dark yellow brown, moist, stiff—very stiff, plastic.
	# 9	17/60					SILTY CLAY; moderate yellow brown, moist, soft, plastic.
-BO	# 10	7/60					CLAY—SILTY CLAY; dark yellow brown, moist, soft—stiff, moderate plasticity.
65	#11	60/60			CL		SILTY CLAY; moderate yellow brown-gray brown, predominant dry, very stiff-hard, slight plasticity.
$\mathbf{E}_{\mathbf{r}}$	#12	56/60					SILTY CLAY, minor sand, dark brown-gray brown, moderately dry, slight plasticity.

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 4



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		T			Γ	T	BORING NO. GB-23
iii iii	3ER	RECOVERY N.)		nc.		1	
333 1.	MPLE & NUMBER	COV	WELL CUMMARY	S ON R rER	SCS	ile E	FIELD ENGINEER D.H. Cox
Į.	SAMPLE E & NU	8 Z	WELL SUMMARY	BLOWS C SAMPLER PER 6	SS	PROFILE	FORTED BY J. Hadeall DATE BEGAN 8/16/88
in P	3.4 TYPE	JRIVE,		m 45		(1.	CHECKED BY J. Hodeal DATE FINISHED 6/17/88 TOTAL DEPTH 252 ft. GROUND SURFACE EL. 13.76 ft.
		מ		1			DESCRIPTION
F 1	# 12	56/60					
1 1							SILTY CLAY; gray brown-brown gray, predominantly dry, very
75	# 13	60/60					stiff, moderate—slight plasticity.
 							
FF					CL		SILTY CLAY; minor sand, dark yellow brown, moist, very stiff, moderate plasticity.
80	# 14	15/60		 	CL		moderate prostructy.
I							
FF							
85	# 15	27/60					
t 1		ĿI		1 1			
F 7							SILTY CLAY; dark gray brown, moist, stiff, plastic.
200]	# 16	16/60]]	СН		
L 1							
							SANDY CLAY; medium gray, moist-wet, stiff, alight plasticity.
F 95 7	# 17	24/60		ĺĺ	CL		i
1 1					_		
1		{		1 1			SANDY CLAY, dark yellowish brown, moist, soft, plastic.
100	# 18	8/60					
t 1					СН		
}				1 1	~``		SILTY CLAY; dark gray—brown gray, moist—dry, very stiff, plastic.
F105	# 19	11/60					,
t 1			ľ	i L			
1							SILTY CLAY; gray brown, minor blue gray, moist—dry, very stiff, moderate plasticity.
110	# 20	60/60		1 1			,,
! 1							
ŀЬ							
115	# 21	8/60		1 1			
t 1				1 (
Еd				1			CLAY-SITLY CLAY; medium-dark gray, moist, stiff, plastic.
127	# 22	10/60		1			
t 1				1 1			SLAV SU TV SLAV A L
t d					CL.		CLAY-SILTY CLAY; dark gray, moist-moderately dry, very stiff-hard, moderate-slight plasticity.
125	# 23	60/60		1			• ,
t 1				[•		
է է							
1.10	#24	60/60		1 1			
ļ 1							
t d			1		Ī		CLAY; brown gray—gray, dry, very stiff, elight plasticity.
135	# 25	60/60	1	1			
f 1							
t j	#26	18/60	1	1 1			
L1401				JL			

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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... Creating a Safer Tomorrow

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to	83	<u>~</u>					BORING NO. GB-23
FEET	MPLE & YUMBER	RECOVERY IN.)		BLOWS ON SAMPLER PER (PER 67)	١.,	ωį	COORDINATES N. 336.115.1
7,	SAMPLE E & YUN	Z EC	WELL SUMMARY	δ. E. B. B.	sos	PPOFILE	FIELD ENGINEER D.H. Cox FOITED BY J. Hadeall DATE BEGAN 8/16/88
UEPTH		ا آپا		BLO AMP		di n	CHECKED BY J. Hadeall DATE FINISHED 8/17/88
9.	s. Bevr	DRIVE,		٧,	ı	l .	TOTAL DEPTH 252 ft. GROUND SURFACE EL. 13.76 ft.
-110			· · · · · · · · · · · · · · · · · · ·	+			DESCRIPTION
t d	# 26	18/60		0.5- 1.0			CLAY/SILTY CLAY; medium to dark gray, brown gray, dry, very stiff — hard, non—plastic.
FF							
145	#27	60/60		3.5- 3.0			
 -	_			į			
F 4					1		
150	# 28	60/60		3.5- 4.5			
F 7	•			""			
L 1				†	1		CLAY/SILTY CLAY; dark gray, dry, hard, non-plastic, brittle.
I I	#29	60/60		4.0- 4.5			
155	410	00,00		7.3			
├ †		 		 -	l		
F 7					ļ		
F.80	# 30	60/60		3.5	a		
F +		1		<u> </u>	~		
1 1				4.0-			
-165-	#3 1	55/60		3.0	ŀ		
F 7				ļ			
1 1							
-1.77	₽ 32	14/60		4.5			
1		igsquare	,	ļ			
Ŀэ				3.5-			
-1.5-	#33	60/60		4.5			
F 1							51.54.01.01.11.11.11.11.11.11.11.11.11.11.11.
h -]					SILTY CLAY; dark gray, dry to moist, very stiff, slightly to non-plastic, increasing sand.
180	# 34	8/60	j	3.0			·
t 1							
┡╶┤							SILTY SANDY CLAY; medium brown, moist, stiff, plastic.
-125 -	# 35	4/60		1.0	СН		į
t 1							
├							Shaker; sand and gravel in clay, wet, soft.
100	# 36	0/60			GC		
1: 1						<i>133</i>	
ŀ ₹							SANDY CLAY; medium gray — brown gray, moist, very stiff — hard, slightly plastic with increasing plasticity.
1.25	#3 7	48/60		4.0 3.0			management process with minimum processing.
┠┤							ĺ
F 7							SILTY CLAY; gray brown, dry, hard, non-plastic, minor sand.
200	# 38	25/60		4.0 4.5	ı		
F -					СL		
t							SANDY CLAY; medium brown, moist, very stiff, moderately
ŀ -	# 39	15 /60		3.0			plastic.
205	Ana	15/60					
t +				3.0-			SANDY CLAY: brown gray; moist to dry, very stiff, slightly
F 7	#40	60/60	İ	3.5			to non-plastic.
₽-210 - 				L	t	<i></i>	

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

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þ.	6 €	≿	Ì		1	1	BORING NO. GB-23
N FEET	MPLE & NUMBER	RECOVERY IN.)		BLOWS ON SAMPLER PER (PER 6")	Ş	E E	FIELD FNGINEER D.H. Cox COORDINATES N. 338.115.1
<u>a</u> .	AMPLE & NUI	7. RE	WELL SUMMARY	LOWS MPLER PER	SSS	PROFILE	EDITED BY J. Hodeoll DATE BEGAN 8/16/88
JEP	JdJ.	DRIVE,	}	S. A.			CHECKED BY J. Hodeoll DATE FINISHED \$/17/88 TOTAL DEPTH 252 ft. GROUND SURFACE EL. 13.76 ft.
210-		 			ļ		DESCRIPTION
	# 40	60/60		3.0			SANDY CLAY; blue gray, predominantly dry, very stiff — hard, slightly to non—plastic.
1 4				3.5~	CL		
215	# 41	60/60		4.5			
Łź	·	 		 	sc		CLÂYEY SAND; gray brown, wet, soft, plastic.
-220-	# 42	60/60		1.0~		***	SILTY CLAY; dark gray, moist to dry, stiff to very stiff —
\mathbf{F}^{\prime}				4.5			hard, slightly to non-plastic.
F3							
225	#3	11/60		3.0			
F 7		ļ	1	<u> </u>			SILTY CLAY; dark gray, moist, very stiff, slightly plastic.
F 4				3.5			SETT CEAT, dark gray, moist, very still, slightly plustic.
-30-	#44	40/60		3.3			
t 1							CLAY/SILTY CLAY; predominantly hard, very stiff ~ hard,
1,51	# 45	60/60		4.5- 3.5			slightly to non-plastic.
t 1	·				CL		
t d							
- 210-	# 46	60/60		4.5			
F7							SILTY CLAY; medium dark gray, dry, very stiff — hard, non—
FF	#4 7	60/60		3.5~			ploatic.
F' 7	•	80/80		4.5			
F 7							SANDY CLAY; brown — gray brown, predominantly dry, hard, slightly to non-plastic.
720	# 48	50/60		4.5			alightly to non-plustic.
!							
F ‡							TOTAL DEPTH 252 FEET 4-1/2" diameter boring
755		l					
1 1	- 1		ļ		ļ		
260-		}	}				
t d	ļ	j					
<u> </u>			ļ				
265	l	1	}				
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

	T						Τ	DODING NO WE 4/D4)
F:	<u> </u>							BORING NO. $W5-4(B1)$
in H	MPLE A NUMBER	l ≿ _			Z a; .	SYMBOL	Lu	COORDINATES N. 338,498.7
7	SAMPLE E & NUI	RECOVERY	WELL SUMMAR	Y	BLOWS ON SAMPLER (PER 6")	2	PROFILE	FIELD GEOLOGIST <u>D. H. Cox</u> EDITED BY J. Hadsall DATE BEGAN 9/7/88
ŗ	AC III	1			SAN	nscs	PR	CHECKED BY J. Hadsall DATE FINISHED 9/8/88
ם	TYPE S	œ				nS(TOTAL DEPTH 67.5 feet GROUND SURFACE EL. 6.55 ft.
1	ļ						l	DESCRIPTION
L '			12" Christy box			_	11.11	SANDY SILTY GRAVELLY CLAY; dark brown black, dry, stiff,
	MD#1	7/18	8"x5' standplpe top of casing		5,6,5	OL		non-plastic, organic.
	MD∦2	8/18		11 [1]	6,6,7			
- ^ -	MD#3	14/18	4" sch. 40 steel casing	4 4	6,7,7			SILTY CLAY; light to medium gray brown, moist, soft, plastic.
	- WD#7	14/18			6,7,7	СН		product.
├ -			Bentonite/ cement grout			0,.		
1,01				1 1	'			
+ +			ļ.	.1 13				SILTY CLAY; medium brown, moist, stiff, moderate plasticity.
				.' '.		CL		
15]				' •	İ			SANDY CLAY; medium brown, moist, stiff, moderate
-			ļ.			CL-		plasticity.
1 1			ļ:,	1 [1		sc		
-20-		- 1	Ł	1 1:1	ł			SILTY CLAY; medium brown, moist, stiff, moderate plasticity.
t 1		1	ſ		l			ole in selection, moderate productly.
+		ſ	,					GRAVELLY SANDY CLAY; medium brown, wet, soft, medium
L 25]		J						subangular gravel with fine to medium subangular to sub-
ŀ - ⊢		Ì	ļ.	. .		CL		rounded sand.
L 1		ļ	1.	:	- 1			SANDY CLAY; medium brown, moist, soft to stiff, moderate
┡╶┤		ŀ			ŀ			plasticity.
L301	į		i,					
I	ł	ſ	!	1 []	- 1			CLAY/SILTY CLAY; medium dark brown, moist, stiff, moderate plasticity.
t 1	ŀ		Ķ	1 11	-		1818	SANDY SILTY CLAYEY GRAVEL; predominantly coarse gravels
- 355 -		1	}·	111	- 1	GC		with sand; fine to coarse, subangular to subrounded, mod. to poorly sorted in clay; medium brown, wet, soft, moderate
F 1		1	}	-	- 1		<i>333</i>	plasticity.
I	i	Į	1	1 [1			1111	SANDY CLAY/CLAYEY SAND; medium gray, wet, soft.
1		i	1.		L	sc		
┠┤	- 1] i		İ			CLAY/SILTY CLAY; medium gray, moist to wet, soft, slightly to moderately plastic.
1 7		ĺ	ļ.			CL		CLAYEY SAND/GRAVEL; fine to medium, subangular to sub-
H H			<u>;</u>	1 1	 -			round, moderately to poorly sorted sand with predominantly medium angular gravel in clay, medium gray, wet, soft
F 1	1	-	Bentonite pellets 45.9 to 47.9 ft.	ابا ا				moderate plasticity.
⊦ ⊢	İ	1	Ti		ļ	sc	VIII	CLAY/SILTY CLAY; medium gray, moist, stiff, slightly plastic.
F 1					ļ			
- 1.0			Centralizer		-			CLAYEY SANDY GRAVEL; medium to coarse gravel and sand
[]	ĺ		4" .010			GC	111	In clay, medium gray, stiff to hard, Indurated, slightly to
F +	}		S.S. screen from 50 to 55 ft.					non-plastic.
$\begin{bmatrix} a_{ij} \end{bmatrix}$			Centralizer					SANDY CLAY; medium gray brown, moist, stiff, plastic.
ŀ┤			#1C sand ———		- 1			
F 1	1	1	E		ſ	СН]
├				** * * * *				
["]	ļ		Bentonite	****		_	1111	SILTY CLAY; olive to brown gray, moist to dry, stiff,
⊦ ┤			Backfill	1111				moderate plasticity.
t 1	1		E			CL		Grading to sandy clay.
100								
t 1			11					
⊦ ∤				9.75" -		一	7777	TOTAL DEPTH 67.5 FEET
t1				g. / J		1	[TOTAL DEL TIT 07.5 FEET

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

	<u>r</u>					BORIN	$\overline{\text{NO. W5}} - \overline{\text{5(C)}}$
FEET	PLE	<u>></u>		Z _c (SYMBOL		COORDINATES N 338.477.9 E 1,553,704.9
Σ.	SAMPLE PE & NUN	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER 6")	S/S	FIELD GEOLOGIST <u>D.</u> Edited by J. Hadso	
\mathcal{F}	AW E	ECC ()		SAN	SCS	CHECKED BY J. Had	
SEP	2	u.			SL	TOTAL DEPTH _160_f	
Lal							DESCRIPTION
F -			12" Christy box ———————————————————————————————————		OL	SILTY CLAY; dark of non-plastic, root r	gray black, moist to dry, stiff, slightly to
t :	MD#1	6/18	top of casing	5,5,6			to medium gray, moist, stiff, minor
	MD#2	10/18		6,6,8		gravels, slightly pla	
L	MD#3	9/18		2,2,3	CL		
-			4 sch. 40 steel			SILTY CLAY: mediu	m to dark brown, moist, stiff, plastic.
F -			casing -				
10			Bentonite/		CL-	Grades to gray bro	own – olive.
			cement grout		CH		
- ' '			[4]			Grades to medium	gray with increasing sand.
F					GC		nedium to coarse, subround angular gravel
t 1						slightly to non-pla	, medium brown—olive, moist to wet, stic.
├ ┤					CL	CLAY/SILŤY ČĽĀÝ;	medium brown, moist, stiff, moderate or sand; fine to medium, subangular to
F 1					OL	subround, moderate	ely sorted quartz and gravel; medium to
<u> </u>						SANDY CLAY/CLAY	subrounded. EY SAND; medium to brown, moist to wet,
F	ļ				CL-	stiff, moderate pla	
t d	j				. <u>sc</u>		terbedded clay, medium to coarse, angular
├ -}	İ	ŀ			GC-		dominant composition: siltstone and sand - ne and chert, sand; medium to coarse,
[.]				1	sc	subangular to subr	ound, moderate to poorly sorted, guartz
t i			[:4 1]	}	-	and milky quartz g CLAY/SILTY CLAY;	medium brown, moist, stiff, moderate
1		ĺ			CL	plasticity.	
				Ì			erbedded clay, medium to coarse, angular
1	į				GC-		dominant composition: siltstone and sand - ne and chert, sand; medium to coarse,
F 1				ſ	sc	subangular to subr	ound, moderate to poorly sorted, quartz
L 1				ŀ		slightly to non-pla	rains, clay, medium brown, wet, soft, stic.
1				i	CL		um gray brown, moist, soft, slightly
1						to non-plastic.	
<u> </u>]		[:4]:1		GC-	SANDY GRAVEL; int	erbedded clay, as above.
F 7		- 1			CL	CLAY/SILTY CLAY.	medium brown, moist, stiff, moderate
t 1		-			CL	plasticity.	mediam brown, moist, still, moderate
\mathbf{F}_{i}					~ [
F 1	- 1	•	[대]	ļ.	GC-	SANDY GRAVEL; int	erbedded clay, as above.
t i					sc		
F 7			[] []			SANDY CLAY; medit	um brown, moist, soft to stiff, slightly to becoming increasingly sticky.
F 1	1					moderate plusticity,	becoming increasingly sticky.
<u> </u>		- 1					
F 1				- 1			1
FRO -							
F 7				į	CL		ļ
t i			[기 [기				.
- 6.E						SANDY CLAY: madic	ım gray—brown gray, moist, stiff,
1 1				- 1		moderate plasticity,	sticky.
├ ┤]					1
[-c 1		l					

SAMPLING METHODS: MD=California Modified

S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California



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...Creating a Safer Tomorrow

							BORING NO. $W5-5(C)$
FEET	9£.				5		` '
	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6)	SYMBOL	JILE	FIELD GEOLOGIST D. H. Cox
DEPTH IN	AMP	00.2	WELL SUMMARY	SAMP	S	PROFILE	EDITED BY <u>J. Hadsall</u> DATE BEGAN <u>9/13/88</u> CHECKED BY J. Hadsall DATE FINISHED <u>9/15/88</u>
EP.	. γ F	č		an ∨′	USCS	_	CHECKED BY J. Hadsall DATE FINISHED 9/15/88 TOTAL DEPTH 160 feet GROUND SURFACE EL. 6.7 ft.
	h-						DESCRIPTION
70 -							CLAYEY SAND; predominantly fine to medium, subangular— subround, moderately to poorly sorted quartz in clay; med.
1 1					sc		brown gray, moist, stiff, moderate plasticity, sticky.
75							
F ~4							SANDY CLAY; medium brown gray, moist, stiff, moderate
F					Cl.		plasticity.
80	·						CLAT/SILTY CLAY; gray brown, gray, moist, soft, very plastic
<u>t</u>							prostite
┠┤					СН		
F 85	.]						
1 1							
t d					CL.		SANDY CLAY; gray brown, gray, moist, soft, moderate plas.
- 90 -							with fine sorted sand. CLAYEY SAND; fine to medium, subangular to subround,
F					sc		mod. to well sorted in clay; brown gray, moist to wet, slightly to non-plastic, minor gravel.
F 4					C1_		SANDY CLAY; brown gray, moist—wet, soft, slightly to non- plastic.
95 -							SANDY GRAVEL; clay interbed, abundant, gravel, pred.
} →					GC		medium, round, moderately sorted, sandstone, siltstone and cherts, sand; medium to coarse, subangular
F7							subround, moderately sorted in clay; brown gray, wet, soft, non to slightly plastic.
-100-	,				CL		SANDY CLAY: medium brown gray, moist, stiff, mod. plas. with sand: medium coarse, subround, moderately sorted.
t 1	-	[CLAYEY SAND; medium coarse, subround, moderately sorted
105					СН		with clay, gray brown, moist, stiff, mod. plas., minor gravel.
F "-	Ì				CH		SAND (CLAY) gray brown, moist, stiff, plastic.
F 1							SANDY CLAY/SILTY CLAY; dark gray brown, moist, stiff, med.
! ,†	}	ŀ			CL		plastic, minor coarse sand.
t d							CLAY/SILTY CLAY; medium gray brown, moist, stiff, very plastic, sticky.
} →	I	-					,
115-							
t 1							•
<u> </u>	[
-120					СН		
F 7	l						
t 1							
125	1				i		
F -				ļ			
F 4	ļ						
130	l			}	sc		CLAYEY SAND; predominantly medium, rounded, moderate to
<u> </u>		1		ŀ			well sorted quartz in clay, gray brown, moist, plastic, sticky. CLAY/SILTY CLAY; medium gray, moist, stiff, plastic, sticky.
F 1	{	1		1			Seaty Sierr Seat, medium gray, moist, sum, piosuc, sucky.
135					сн		
上寸	}			}			
F}	1	ļ					

SAMPLING METHODS: MD=California Modified S=Split Barrel

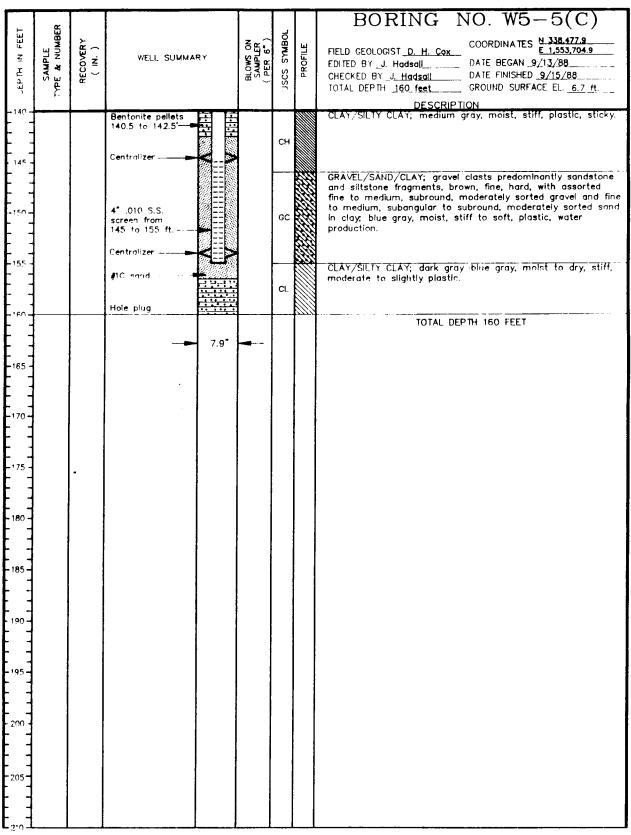
PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: W5 -5C.DWG

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...Creating a Safer Tomorrow



SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

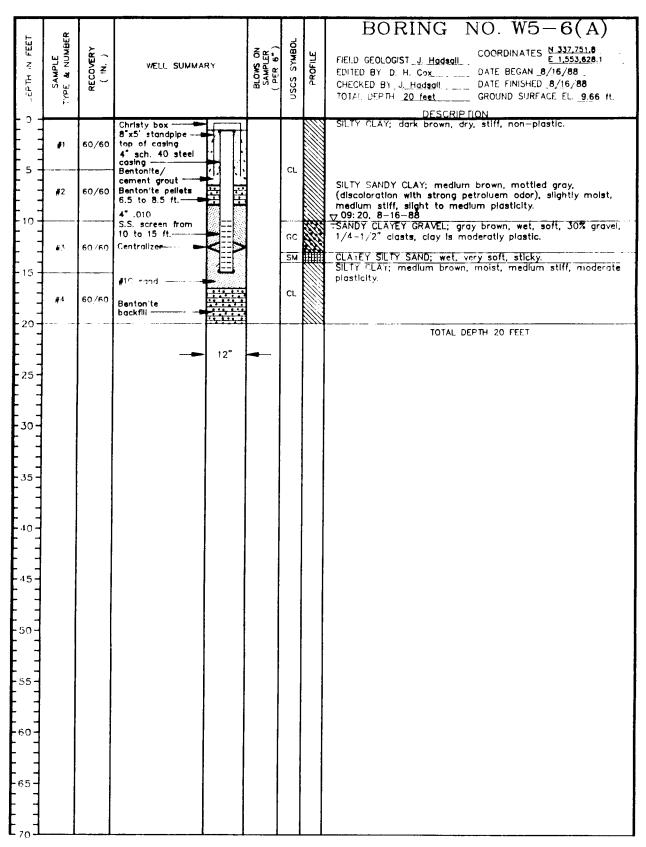
CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: W5-5C.DWG

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... Creating a Safer Tomorrow



DRILLING CO.: Water Development Co. DRILLING METHOD: CMF 55 Hollow Stein Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California للنا

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: W5 -6A.DWG

PAGE 1 OF 1

	,	,	,			,	DODANG NO THE STATE
1.	α		{	1		1	BORING NO. $W5-7(A)$
FEET	MPLE & YUMBER	> -	1	z ~	SYMBOL	١	COORDINATES N 336.916.8
7	AMPLE & VIA	SOVERY IN.)	WELL SUMMARY	SAMPLER (PER 6")	YME	POFILE	FIFT D. GEOLOGIST, J. <u>Hodeall</u> COORDINATES N. 336.916.8 E. 1,553,377.6
Į	1 2 8	RECO (IN		NAMA PER	t/a	Ş.	EDITED BY D. H. Cox DATE BEGAN 8/9/88
F.	1, 9) å:	ì	70 07)SC] ".	OHLOKED BY J. Hadsall DATE FINISHED 8/10/88 TOTAL DEPTH 70 feet GROWND SURFACE EL. 13.7 ft.
	1.0	1				l	The state of the s
⊩ጉ⊣	 	┼──	12" Christy box-				DESCRIPTION SILTY SAND; with gravel, medium brown, dry, medium dense,
E 3	MD#1	7/18		6,10,16	SM	Щ	angular to subrounded, gravel lenses.
├ →	MD#2	8/18	tep or cosing	4,5,8			SILTY CLAY; brownish black, slightly moist, very stiff, grass roots, moistens and softens, large angular—subrounded
F 5 3		t====					gravel clasts throughout.
-	MD#3	18/18	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5,11,11			SILTY CLAY; medium brown with mottled gray, slightly moist,
F 7	MD#4	12/18		6,12,18	CL.		soft, slight to moderate plasticity. Strong product odor increasing with depth — gray discoloration has gos odor.
$\mathbf{E}_{12}\mathbf{J}$	S	24/24		ì			
F 3		}		- 1			고 14:30, 8-9-88 본 Clay is fractured, discolored gray, with water and odiferous
t d	s	60/60	4" sch 40 steel				petroleum odor.
1 -		1	casing	[ML		CLAYEY SILT; moderate brown with light gray discoloration, very moist, soft, petroleum odor.
t 1		t	Bentonite/	ł		шШ	SILTY CLAY; moderate brown with mottled gray, discoloration,
}	s	60/60	cement grout	}		33	medium stiff, moderate plasticity, very slight petroleum ndor.
1 1		100,00		1			
} >>-	ļ	 		Ì			Fractured zone with Increasing silt.
1 1]			
}	S	80/80			CL		Small sand seam sand seen along sides of core but not
125		ļ		- [-		in core.
F ~		[Bentonite pellets	- 1			
t 1	s	60/60	26.75 to 28.25'—	- 1			
F 1			4" .010	1			
F]			S.S. acreen from	1			SILTY CLAY; moderate brown, moist, medium stiff, 1/8-1/4"
1	S	60/60		ł	GC		gravel clasts, mudstone. SILTY CLAYEY GRAVEL; wet, loose, 1"-1/4" gravels.
F7		1 1					SILTY SANDY CLAY; moderate brown, moist, medium stiff, slightly plastic.
E 1					CL	15	anging pluatic.
F 7	s	60/60		- }-	GC		SILTY CLAYEY GRAVEL; wet, loose, 1/2-1/4" clasts.
t 1	3	00/60		}		11.	SANDY CLAY; moderate brown, moist, medium stiff, slightly
F 7				}	CL		pla st ic.
t 1			#IC sand	ŀ	GM		SILTY SANDY GRAVEL: moderate brown, wet, loose.
1	S	60/60	Think	ſ			SILTY CLAY, gray, moist, very stiff, high plasticity.
11			Bentonite	ļ	СН		į,
F 1			backfill -	- 1			1
t 1	s	60/60		t	SM		SILTY CLAYEY SAND; gray brown, very moist, medium dense.
- 3							SILTY CLAY; moderate brown, moist, medium stiff, plostic.
[:0]				ł	CL		ì
ŀ┤	s	60/60	크라다 무슨	j	~ [1
ţj	•			1			
F55-				- 1	SM		SILTY SAND; moderate brown, moist(saturated), medium dense, loose.
t j	_			-			SANDY CLAY; with gravel, mottled gray brown, stiff,
f 1	S	36 /60		- [ŀ		moderate plasticity.
t _{nn} 1			基基制	1			
F -	-		- 横端計	1	- 1		SILTY CLAY; moderate brown, very moist, moderatly stiff, plastic.
t 1	s	60/60		1.	CI		,
1		{		1	CH		
┖╚┇╅				1			ļ
1	s	60/60	12"				
t j		30,00					ł
$\mathbb{L}_{\mathbb{P}^n}\mathbb{1}$	1				4	Liz	

DRILLING CO.: Water Development Co.

DRILLING METHOD: CME 55 Hollow Stern Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California TOTAL DEPTH 70 FEET

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...Creating a Safer Tomorrow

_		,				_	
	~						BORING NO. $W5-8(A)$
FEET	9E:	<u>_</u>		, ~	点		0000000 N 337.193.8
	MPLE A NUMBER	RECOVERY	WELL CHAMAGY	BLOWS ON SAMPLER PER 6	SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadeall COORDINATES N. 337.193.8 E. 1,553,499.5
ž I	SAMPLE E & NUN	g ₹	WELL SUMMARY	§ ₹ ₽	S	٥	EDITED BY D. H. Cox DATE BEGAN 8/5/88
ЕРТН	SA	, RE		ᆸᇸᇮᇬ	SCS	n.	CHECKED BY J. Hadeall DATE FINISHED 8/8/88
Ä	٤				⊃		TOTAL DEPTH _50_ft GROUND SURFACE EL. 13.47 ft.
- 0 -							DESCRIPTION DESCRIPTION
 		2/15	12" Christy box	10,6,4	GМ		SILTY SANDY GRAVEL; medium brown, moist, subangular gravel clasts, 1/4-1/2" diameter clasts.
	MD#1	8/18	top of casing	10,6,4		144	SILTY CLAY; dark brown/black, slightly moist, stiff, medium
	MD#2	14/18		4,9,17			to high plasticity.
- 5 -	MD#3	7/18		4,8,10	l		
	MD#4	11/18		4,5,8	CL-		
<u> </u>	S	30/30			l		SILTY CLAY; brown (showing gray discoloration), moist, low
10-		30/30		i i			plasticity, mudstone fragments, petroleum odor.
L ' ' 4							SILTY SAND; gray (discolored appearance), wet, fine to
├ ┤	s	60,/60			SM	H	medium grained sand, petroleum odor.
		3, 30			l		SILTY CLAY; gray brown, moist, soft, moderate plasticity.
- 15 -		ļ	4" sch. 40 steel				Grades to a medium brown color at 14 ft.
t -			casing —				ļ
	s	60/60	Bentonite/		CL		
╟╶┤			cement grout		ŀ		
20-							
1 -	_	/					CLAYEY SILTY SAND; gray brown, fine to medium grained,
\mathbf{h}	S	60/60	A A		sc		very moist-wet, very soft grades to a loose, slit sand,
25							medium grained.
							SILTY CLAY; medium brown, moist, medium stiff, moderate
t i	s	60/60					pla s ticity.
1 -		, i			CL		
- 30 -			[] [] [] [] [] [] [] [] [] []				
			[1]				
1 -	s	60/60					
t ,,,†			Bentonite pellets			3	SANDY GRAVEL; gray brown, medium to coarse grained sand,
[:3]			34.9 to 35.7 ft			တိုင်	loose, wet, subrounded gravels 1/8-1/2" clasts.
1 -	s	30, 60	4* 010		G₩	80	
1 1	ا	30,00	S.S. screen from			ૡૢૢૢૢૢૢૢૢ	
-40-			38.1 to 43.1 ft.—			(46	SILTY CLAY; medium brown, moist, stiff, moderate plasticity.
t d							s.c. servi, median brown, moist, string moderate prosticity.
L 1	s	60/60	#1C sand			III.	
F +							
[45]			-1 · 1 · 1 · 1		CL		į
1	ς .	ND	Bentonite				
t d	,		backfill				
50							
├ ┤	1						TOTAL DEPTH 50 FEET
L 1	ļ		12"	-			
⊦ ⊣	- 1						
-55-	1						
F 1		 					
1							
Land		- 1					
L ~~1	- 1	į	j				
F +		[,		1
t 1		1		İ	j		
-65-		İ					
h 4	[ł					
F 1					1		
F 4	}	[İ			
L 70 T	l		 				

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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... Creating a Safer Tomorrow

_			<u></u>	,		_	,
1.	o _C	i				1	BORING NO. $W5-9(A)$
FEET	<u> </u>	-		z ^	ЭČ		GOODDINATES N 336,107.9
14. 7	MPLE & NUMBER	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6°)	SYMBOL	PROFILE	FIFLD GEOLOGIST W. Hopkine COORDINATES N. 336,107.9 E. 1.553,067.7
۾	SAMPLE E & NU	ố Z	MCCC SOMMONY	AMP		õ	EDITED BY J. Hadsall PATE_BEGAN_8/2/88
CEPT	SA	AE)	:	1 m 2 7	SCS	l ".	CHECKED BY J. Hadsall PATE FINISHED 8/2/88 TOTAL DEPTH 28 feet GROUND SURFACE EL. 13.47
ä	ř	1	!		⊃		<u></u>
- 0-			12" Christy box			i Tarana	DESCRIPTION SILTY CLAY: dark brown, moist, stiff, low to moderate
t i	MD#1	9/18	8"x5" standpipe	6,9,14			plasticity, organic—rich.
F 7			top of casing		OL		PEBBLY CLAY; dark brown, dry to moist, very stiff, low
5 -	MD∦2	10/18	4" sch 40 steel	6,12,16			plasticity, organic-rich.
F°]	MD#3	12/18	Bentonits/	9,12,10	CL		SILTY CLAY; med. to It. brn., wet, med. stiff, low pl. pebbly.
	MD#4	0/18	Cement grout	6,9,10	SW		SAND: light brown, wet (saturated), loose, with gravel clasts,
	s	70 /70	8.5 to 9.9 ft.			1111	medium to coarse grained. SANDY CLAY; medium to light brown, wet(saturated), stiff,
- 10 -	,	36/36			CL		low plasticity.
	s	6/24	Centralizer				CLAYEY SILTY SAND; medium brown, wet(saturated), soft,
┡╶┤			4" .010		SM		loose, low plasticity.
L			S.S. screen from			Ш	SILTY SAND; medium brown, wet, loose.
- 15 -	s	60/60	11.9 to 16.9 ft.		CL		SANDY CLAY; medium brown, wet, medium stiff, low to
├ ┤		<i>'</i>			_		moderate plasticity. CLAYEY SIL ^T Y SAND; orange brown, wet, soft, low plasticity.
			#1C sand		SM		
20					- ĒL	////	SANDY CLAY; orange brown, wet, medium stiff, low plasticity.
h -	S	60/60				86	SILTY SANDY GRAVEL; medium brown, wet, loose.
					GW	188	,
ŀ⊸			Bentonite		CL		SILTY CLAY, medium brown, wet, stiff, moderate plasticity. SILTY SAND; medium brown, wet, loose.
- 25 -	s	12/60	backfill-				SANDY CLAY; medium brown, wet, stiff, moderate plasticity.
F 7			11 11 1		CL		
F 1						2777	TOTAL DEPTH 28 FEET
30			 12"				TOTAL BEFTIT 28 TELT
F "-							
t i							
F 4							
- 35 -				1			
F 1							
╟┤		1					
40							
F1							
F 1							
F 1		ı					
- 45 -							
t 1							
t 1							
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



 \dots Creating a Safer Tomorrow

						_	
_	α						BORING NO. $W5-10(A)$
FEET	4	-		z ~ ^	쥖		COORDINATES N 337.143.2
Ζ	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	SYMBOL	PROFILE	FIFTO GEOCOGIS! Milliams/Hobkins E 1,333,410.7
<u>-</u> ع	₽ ₹			SER A	S	Š	EDITED BY J. Hadsall DATE BEGAN 8/19/88
EP TH	ς β	2		m "	SOS	1	CHECKED BY J. Hadsall DATE FINISHED 8/22/88 TOTAL DEPTH 28 feet GROUND SURFACE EL. 13.47
o.	L C	i					
-0-	<u> </u>		12" Christy box		-		DESCRIPTION CLAY: dark brown, moist, medium stiff, moderate plasticity,
t i	MD#1	7/18	8"x5" standpipe	4,7,9	ЭΗ-		trace pebbles.
- -	ND 43	12/19	top of casing	435	ÖL		CLAY; medium brown, moist, very stiff, low to moderate
5 -	MD#2	12/18		4,3,5			plasticity.
L ~	MD#3	10/18	4" sch. 40 steel	6,9,10			SANDY SILTY CLAY; yellow brown, moist, soft, non-plastic.
t i		ļ. <u>.</u>	casing				
1-4					CL		
F 10 -	s	60/60	Bentonite/				GRAVELLY SILTY CLAY; grayish green, wet, stiff, non-plastic,
E 1			cement grout				low plastic.
1		ļ			SM	hma	SILTY SAND; greenish gray, wet, soft, non-plastic, trace
15						иш	pebbles and cobbles.
├	S	60/60	Rentanita pallata				GRAVELLY SILTY CLAY; greenish gray, wet, soft, low to
t i			Pentonite pellets		CL		moderate plasticity.
F 1							
20-	S	42/42	Centralizer		SP		SAND; moderate brown, wet(saturated), loose, fine to medium
			4" .010 EE			600	grained. SANDY GRAVEL; grayish brown, wet(saturated), very loose,
┢┤			S.S. screen from		GW	જું	sand coarsens with depth.
25-	S	60,/60	Centralizer			90	
[~]			#IC sand -		CI.		SILTY CLAY; yellowish brown,wet, stiff, low plasticity.
L 1			Bentonite backfill		CI.		
F 4				- 1			TOTAL DEPTH 28 FEET
- 30 -			-► 12"				
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: W5-10A.DWG

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...Creating a Safer Tomorrow

SEPTH W FEET	SAMPLE TYPE & NUMBER	RECOVERY (N.)	NFEE SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	BORING NO. W5-14(A) FIELD GEOLOGIST J. Hadsall FDITED BY D. H. Cox DATE BEGAN 8/12/88 CHECKED BY J. Hadsall TOTAL DEPTH 70 (eet GROUND SURFACE EL. 7.6 FT. DESCRIPTION
Ē :	MD#1	6/18	8"x5" standpipe	4,5.9 4,10,7			SANDY SILTY CLAY; medium brown, mottled brown black, slightly moist, soft to medium stiff, moderate plasticity.
F 5 -	MD#3	11/18	4" sch. 40 steel casing	4,5,8			
	S	42/42	Bentonite/ cement grout Bentonite pellets	4,3,6	CL		
10 =	S	60/60	9 to 10.1 ft.		SP		SANDY SILTY CLAY; gray brown, discolored appearance, petroluem odor, slightly moist, medium stiff, moderate plasticity. SAND; gray, wet, loose, medium grained, petroleum odor.
, , , , , , , , , , , , , , , , , , ,			4" .010 S.S. screen from 12 to 17 ft.		_ 5P		SANDY SILTY CLAY; medium brown, mottled gray, moist, medium stiff, moderate plasticity, slight petroleum odor. 3" lens of sand; gray, wet, petroleum odor.
	s	60/60	#IC sand Bentonite backfill				SILTY CLAY; moderate brown, molst, medium stiff, moderate plasticity.
- 20 -	s	60/60	12"——	-			
25	s	60/60			CL		SANDY SILTY CLAY; moderate brown, moist, medium stiff, moderate plasticity, mudstone fragments.
30							
.55	S	60/60					
	s	60/60					
101	s	60/60	Bentonite/cement grout		СН		SILTY CLAY; gray brown, molst, very stiff, plastic.
15 🖠				Ţ	CL		SANDY CLAY; gray brown, moist, soft, moderate plasticity.
, , , ,	S	60/60			сн		SILTY CLAY; gray brown, mottled gray with red oxidation, moist, stiff, plastic.
1	s	60/60	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		СП		SANDY SILTY CLAY; brown with gray red mottles, moist,
22.4	s	60/60			CL		soft to very soft, low plasticity.
	s	60/60					SILTY CLAY; moderate brown, gray mottling, moist, medium stiff, highly plastic.
65 4 1 1 1 1 1	5	60/60			СН		

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California



...Creating a Safer Tomorrow

WELL SUMMARY Solve Service Se	_		т—	 			T	DODING NO WE 15/A)
2 Christy box—		E UMBER	<u>}</u>		ON ER S")	MBOL	<u> </u>	BORING NO. W5-15(A) COORDINATES N. 337.998.3
2 Christy box—	F F	SAMPLI	RECOVE (IN.	WELL SUMMARY	BLOWS SAMPL (PER (scs sw	PROFI	EDITED BY D. H. Cox DATE BEGAN 8/16/88 CHECKED BY J. Hodsall DATE FINISHED 8/17/88
Up 9/18 9/18 printing proper to all coming proper t	,	<u>a</u>				Sn		DESCRIPTION
MODA 10/18 4" sch. 40 steel calling. 5 MODA 10/18 6 metholite pellets 11 to 13.2 ft. 13 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 13.2 ft. 15 to 20 ft. 15 to	E '-	MD#1	9/18	8"x5' standpipe —	4,4,7	GM		
MD43 10/18 Sentonite/ cement grout	F = -	MD#2	9/18	4" sch. 40 steel	5,7,12			SILTY CLAY; dark brown, slightly moist, moderate plasticity.
Sententite pellets 11 to 13.2 ft.		MD#3	10/18		5,9,11			
S 60/60 S 6	L . 3	S	40/40	cement grout				
SS screen from 15 to 20 ft. SS						CL		
SANDY CLAY; medium brown, moist, soft, sticky, moderately plostic. SM SLTT SAND; moderate brown, wet, loose. SLTT SANDY CLAY; medium brown, moist, medium stiff, moderate plasticity. S 80/60	- -	S	60/60	S.S. screen from				water, moderate prosticity.
SMUTY SANDY CLAY; with gravel (10%), tan-gray brown, moist, stiff, moderate plasticity. S 60/60 S 60/60 S 60/60 S 60/60 S 60/60 S 60/60 S 60/60 S 60/60 S 60/60 S 60/60 SANDY CLAY; with gravel (10%), tan-gray brown, moist, stiff, moderate plasticity. SANDY SILTY CLAY; tan brown, moist, soft to medium stiff, moderate plasticity. Sand content decreases and grades to a silty clay from 35-40 ft. TOTAL DEPTH 40 FEET	['.']							
SANDY CLAY; with gravel (10%), tan-gray brown, moist, stiff, moderate plasticity. SANDY SILTY CLAY; tan brown, moist, soft to medium stiff, moderate plasticity. Sand content decreases and grades to a silty clay from 35-40 ft. 12* TOTAL DEPTH 40 FEET		S	60/60			SM		SILTY SAND; moderate brown, wet, loose.
SANDY CLAY; with gravel (10%), tan-gray brown, moist, stiff, moderate plasticity. SANDY SILTY CLAY; tan brown, moist, soft to medium stiff, moderate plasticity. Sand content decreases and grades to a silty clay from 35-40 ft. TOTAL DEPTH 40 FEET				#1C sand				moderate plasticity.
S 60/60 S 60/60 S 60/60 S 60/60 SANDY SILTY CLAY; tan brown, moist, soft to medium stiff, moderate plasticity. Sand content decreases and grades to a silty clay from 35-40 ft. TOTAL DEPTH 40 FEET	- -	S	60/60	Bentonite				
S 80/60 S 80/60 S 80/60 SANDY SILTY CLAY: tan brown, moist, soft to medium stiff, moderate plasticity. Sand content decreases and grades to a silty day from 35-40 ft. TOTAL DEPTH 40 FEET		_		backfill -				SANDY CLAY: with gravel (10%) tan-gray brown moist stiff
SANDY SILTY CLAY; tan brown, moist, soft to medium stiff, moderate plasticity. Sand content decreases and grades to a silty clay from 35-40 ft. TOTAL DEPTH 40 FEET 12" TOTAL DEPTH 40 FEET	70	S .	60/60			CL		
moderate plasticity. Sand content decreases and grades to a silty clay from 35-40 ft. TOTAL DEPTH 40 FEET 12" 12"								SANDY SILTY CLAY: tan brown majet soft to medium stiff
S 60/60 12" TOTAL DEPTH 40 FEET 12" -60-	E 3		60/60	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				rnoderate plasticity.
12" TOTAL DEPTH 40 FEET 12"	- 1	·	eo /eo	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
-45- -45- -50- -50- -60-								
-50				— — 12"				TOTAL DEPTH 40 FEET
-60-	45							
-60-	F ‡							
-60-	50							
	Ed							
	55							
	<u> </u>							
-65-	60							
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: W5-15A.DWG

			· — — — — — — — — — — — — — — — — — — —		_		L BODING NO ME 10/1
1.	pc,	}		j	١.	ļ	BORING NO. $W5-16(A)$
FEET	1 1 1 1	≿		Z~.	ត្ត	l.,	FIELD GEOLOGIST W. Hookins
Z	SAMPLE	RECOVERY (IN.)	WILL SUMMARY	BLOWS ON SAMPLER (PER 6*)	SYMBOL	PROFILE	
Į	A A	[유 등		25.5	S	5	EDITED BY J. Hodsoll DATE BEGAN _8/15/88 CHECKED BY J. Hodsoll DATE FINISHED _8/16/88
G.	SA	œ !		m " J	SSCS	_	TOTAL DEPTH 37.7 feet GROUND SURFACE EL. 12.05 ft.
	F-						DESCRIPTION
F 0 d			12" Christy box		_	:::::	SILTY CLAY; dark brown, dry to moist, stiff, moderate to
F 7	MD#1	12/16	8"x5' standpipe == top of casing	6,11,20	ОН		hi g h pl as ticity.
t :	MD#2	12/18	4" sch. 40 steel	7,12,14			SILTY CLAY; light brown, dry to molst, stiff, low to moderate plasticity.
5 -			Bentonite pellets		CL		prostructy.
╟╶┪	MD#3	12/16	6.0 to 7.0 ft. —	4,5,8			
	S	18/18					CLAYEY GRAVEL; medium brown, wet(saturated).
F., +		1	Centralizer ———				CLATET GRAVEL; medium brown, wet(saturated).
10	S	28/60	NC aaug t-		GC	333	
⊢ →			Centralizer				GRAVELLY SANDY CLAY; medium brown, wet(saturated), stiff
E 1			4" .010				low to moderate plasticity.
- 15 -	S	48/48	S.S. screen from 8.0 to 13.0 ft. ~		CL		
t d					L		
F 7			11 11 11		SM		SILTY SAND; medium brown, wet(saturated).
F.,-	s	52/60			CL		SANDY CLAY; medium brown, wet, stiff, moderate plasticity.
20-		<u> </u>	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		- C.		
} -			111111		SM		SILTY SAND; medium brown, wet, very loose.
t 1							SANDY CLAY; medium gray brown, wet, stiff to very stiff,
- 25 -	S		Bentonite				low plasticity.
t d			backfill				
F 7			1 2 2 2 2				
F +	s	60/60	11111				
30	3	80780			CL		SANDY GRAVELLY SILTY CLAY; medium brown, wet(saturated),
F +			11 12 12 12				lew to moderate plasticity.
t 1				.			
-35-	S	48/60					
┠┤			4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	· [
F 7			 			7777.	TOTAL DEPTH 77.7 FEET
F., +			12"				TOTAL DEPTH 37.7 FEET
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

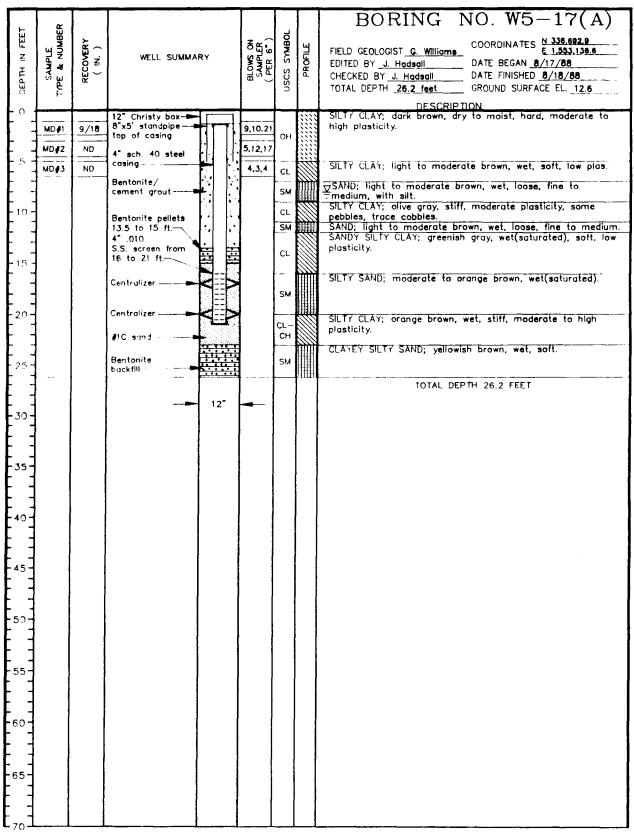
PAGE 1 OF 1



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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: W5-16A.DWG



SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: W5-17A.DWG

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I D DEPTH IN FEET I	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	BORING NO. W5-18(A) COORDINATES N. 336.525.1 E 1.553,246.1 EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 22.5 ft. DESCRIPTION COORDINATES N. 336.525.1 E 1.553,246.1 DATE BEGAN 8/10/88 DATE FINISHED 8/10/88 GROUND SURFACE EL. 12.1 ft.
F " =		7.5	12° Christy box	50.5	οн		CLAY; dark brown, moist, medium stiff, high plasticity.
h d	MD#1	12/18	too of casing	5,9,15		11111	SILTY CLAY; medium brown, dry to moist, medium stiff, low
F 7	MD#2	12/18	4" sch. 40 steel	6,9,15	CL		pigaticity
- 5 -	MD#3	14/18	Bentonite/ cement grout	4,7,12	Mt.		CLAYEY SILT; orange brown, dry to moist, low plasticity.
} -	S	36/36			a.		GRAVELLY SANDY CLAY; light brown, wet(saturated), medium ✓ stiff to soft, low plasticity.
F]			Bentonite pellets		 ML		SILTY SANDY GRAVELLY SILT; medium to light brown, wet
L '^ =	s	36/60	4" .010				(saturated), soft, non-plastic. SILTY SAND/GRAVELLY SAND; medium orange brown, wet
F -			S.S. screen from		SM-		(saturated), loose.
F 7			11 TO 16 ft.				SAND; medium brown, wet(saturated), loose, fine to medium
L154			Centralizer		SW		and coarse grained.
┣ ┤	S	52/60	IIC sand		CL		SANDY SILTY CLAY; medium brown, wet, medium stiff, moderate plasticity.
F 4					SC		CLAYEY GRAVELLY SAND; medium brown, wet, low plasticity.
[]	s	42/42	Bentonite		SP	77777	SAND; medium brown, wet, loose, medium to coarse grained.
F -			backfill -		CL		SANDY GRAVELLY SILTY CLAY; medium brown, wet, stiff, moderate plasticity.
1 1							TOTAL DEPTH 22.5 FEET
25-			12"				
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SAMFLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



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	۔						BORING NO. $W5-19(A)$
FEET	MPLE & NUMBER			, ,	ğ	1	COORDINATES N. 138.581.0
	H S	RECOVERY (IN.)		BLOWS ON SAMPLER (PER 6")	SYMBOL	PROFILE	FIELD CEOLOGIST W. Hopkins COORDINATES E 1,553,093.2
EPTH IN	SAMPLE E & NUN	∂ટ્ર	WELL SUMMARY	S P R	ís (S	ğ	EDITED BY J. Hadsall DATE BEGAN 8/3/88
d d	SA) AEC		목양리	SOS	ā	CHECKED BY J. Hadsall DATE FINISHED 8/4/88
36	ξ	1			כ	l	TOTAL DEPTH 41 feet GROUND SURFACE EL. 12.5 ft.
			40' 0' -1				DESCRIPTION PEBBLY CLAY: black, moist, stiff, high plasticity, organic—
+ +	MD#1	6/18	12" Christy box	5,9,12			rich.
	MD#Z		top of casing 8"x5" standpipe	L	он		
	MO#4 dup	12/18	o x5 standpipe -	3,12,14			
	MD#3	12/18	4" sch. 40 steel	5,7,10	SM		SILTY CLAYEY SAND; light brown, moist to wet, with pebbles.
├ ┤			casing	i i			SANDY SILTY CLAY; light greenish brown with red, wet,
]					medium stiff, moderately plasticity.
- 10 -	s	48/60	1	i i	Ct.		SANDY PEBBLY SILTY CLAY; medium gray, wet (saturated),
	,	10,00	Bentonite/				strong petroleum odor.
} →			cement grout		SM		SILTY SAND; medium gray, wet, loose.
15				}			SILTY CLAY; medium gray with orange mottling, wet, very
	S	60/60			CL		soft, moderate plasticity, strong petroleum odor.
t 1							SILTY SAND; orange brown mottled, moist to wet, medium
F 7					SM		dense.
1-20-	s	60/60		[SANDY SILTY CLAY; orange to brown mottled, wet, very stiff,
F 7			Bentonite pellets	}	CL		low plasticity.
			22.8 to 24.2 ft-		SC		CLATEY SAND; medium orange brown, wet (saturated).
11		60 '60	Centroliner		30	11/1	SAND: SILT: CLAY; medium orange brown, wet, stiff, low
 	S	60/60			CL		plasticity.
t i					ML		CLAYEY SILT; medium orange brown, wet, stiff, low plasticity.
1 -							SILTY SAND; medium orange brown, wet (saturated), dense.
70-	s	30,/60	4" .010				· · · · · · · · · · · · · · · · · · ·
E d		30,10	S.S. screen from		SM		SILTY SAND; orange brown and gray, wet (saturated), fine to medium grained sand.
1			27 to 37 ft	} }			, i
F 7	NO REC.	0/36			SW		SAND; medium brown, wet (saturated), medium dense, fine to coarse.
h -			Centralizer			1111	SILTY (LA); medium brown with gray and orange spots, wet,
	s	60, '60	#IC cond				stiff, moderate plasticity.
F +			Bentonile		CL		
["]			hackfill	 		VIII)	
├ ┤							TOTAL DEPTH 41 FEET
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F 4							.
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

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1.	_ ~	İ	Í	- 1			l	BORING NO. SB5-1
FEET	SAMPLE TYPE & NUMBER	 		Į.	7 ^	ď	1	2000000 N 337 745 0
, z	별	RECOVERY	WELL SUMMAR	,,	BLOWS ON SAMPLER (PER 6")	SCS SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadsall COORDINATES N. 337.745.0 E 1.553.637.4
	B &	[§ Z			§ ₹ £	5	õ	EDITED BY D. H. Cox DATE BEGAN 8/2/88
EP 7H	ایک	₩)	(NO WELL COMPLE	TED)	用 s, c	ပ္တိ	α.	CHECKED BY J. Hadsall DATE FINISHED 8/2/88
7	}			ŀ			Į .	TOTAL DEPTH 45 feet GROUND SURFACE EL. 9.6 ft.
- c -	 _	↓						DESCRIPTION
- H	MD#1	10/18	}	ŀ	4,8,16	СН		SILTY CLAY; dark brown, moist, stiff, high plasticity.
	1	10/10		ŀ	4,0,10			CLAYEY SILT; tan, molst, stiff, low plasticity.
	MD∦2	11/18		l	4,5,8	ML		GENTET SIET, tall, moist, still, low pigsticity.
5 -	MD#3	15/18	1	ŀ	4,6,9	W1L	M	
Γ.	ND#4	18/18	,	!	4,6,9			SILTY CLAY; gray brown with discolored gray patches, moist,
ጉ -	 -	 		1		CL		soft, medium plasticity, fuel odor.
F ₁₀ -	5	24/24		[
 	ł	1		- 1		SM	嬹	SILTY SAND; gray, discolored, wet, med. dense, fuel odor. SILTY CLAY; tan gray, grading to brown, moist, medium_stitk.
t :	s	60/60		1		CL		moderate plasticity.
[ł			1		SM	Щ	SILTY SAND; tan, wet, medium dense. SILTY CLAY; brown medium, moist, medium stiff, moderate
- 15 -	 -			1	l			plasticity.
Į :	1	60/60]	ļ		CL		F
	s	60/60		ì				
-20-			1	i				
F. ~-	ł	}		ł	Į	ML	Щ	SANDY SILT; medium brown, very moist, very stiff. SILTY CLAY; medium brown, moist, stiff, moderate to high
† -	s	60,/60						plasticity.
		[ĺ				, , ,
- 25 -				Ì	- 1			
<u> </u>			J	J				
	S	60/60			1			
\mathbf{t}_{m}				- 1				
- 30 -				1		CL-		
⊦⊸	s	60/60	İ		ļ	СН		
L 1				- 1	i			
- 35 -	·		ł		l l			
t i								
1	S	60/60	İ	l	- 1			
.			1	-	1			
40			Į.	j	j			
I -	s	60/60	1	1	ŀ	SM		SILTY SAND; very moist, soft, medium grained.
t 1	Ì	1		1	ſ	CL-	111	SILTY CLAY; gray brown, moist, stiff, moderate to high
45						СН	7777	plasticity.
t 1	J	J			ļ	- 1		TOTAL DEPTH 45 FEET
1 4	ļ		[1	Í			8 diameter boring
		- 1	1	- 1	i	-		
-50 -]	j	ļ	- 1	j	ļ	j	
1		ļ			1			
F 1	ĺ	1	1	j	- 1	l	1	İ
-55-	l	1	}	1	- 1	Į		ļ
t 1]		1	j	1			
1	ĺ	1	ĺ		[- 1	ĺ	
t 1	ł		}	- 1	l	-		
60	- 1	•		J	J		j	
F -		- 1						ſ
t i	- 1	1		l		- {	l	
-65		ł		1		ı	-	j
h 1		ļ		t			- 1	
F 1	Í	[[1	- [- [İ
₽ ┤		- 1		-				}
F 70 T							1	

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO .: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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... Creating a Safer Tomorrow

BORING LOGS OF SITE 6 WELLS WILL BE INCLUDED IN FUTURE REPORTS

BORING LOGS OF SITE 7 WELLS WILL BE INCLUDED IN FUTURE REPORTS

BORING LOGS OF SITE 8 WELLS WILL BE INCLUDED IN FUTURE REPORTS

APPENDIX I

SECTION 9.0 - SITE 9 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

							BORING NO. GB#7
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST C. Wallace FDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 260 feet DESCRIPTION COORDINATES N. 336,983.7 E 1,548,070.8 E 1,548,070.8 DATE BEGAN 7/18/88 DATE FINISHED 7/20/88 GROUND SURFACE EL. 14.1 ft.
	#1	20/60			ΛI.		SILTY CLAY; light to medium brown, moist, medium stiff, low to medium plastic, top — highly organic. Logged from shaker SILTY SANDY CLAY; medium gray, moist, stiff, medium plastic.
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	#2 #3	4/60 5/60			СН		SILTY CLAY; mottled medium brown and light gray, very moist, medium stiff, high plasticity.
2011	#4	2/60			CL.		SILTY CLAY; medium gray, moist, low plasticity. SILTY SANDY CLAY; medium gray, moist, stiff, low to medium plasticity.
35 -	#6	0/60			SP		SAND; medium to coarse grained. Logged from shaker.
40 1	#7 #8	13/60 8/60			CL		SANDY SILTY CLAY; medium brown, wet, medium stiff, low plasticity. SANDY SILTY CLAY; grayish brown, very moist, medium stiff, low to medium plasticity.
-45	# 10	20/60			SC		SANDY SILTY CLAY; mottled medium brown and gray, very moist, medium stiff, low to medium plasticity. CLAYEY SAND; medium grained.
55 60	#11 #12	14,/60			CL- CH		SILTY CLAY; medium brown, very moist, medium stiff, medium to high plasticity. SILTY CLAY; mottled medium brown and gray, very moist, medium stiff, medium to high plasticity.
65	#13	22/60			сн		SILTY CLAY; medium gray, moist, medium stiff, high plasticity.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB7.DWG

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						П	BORING NO. GB#7
JEPTH 11 FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST C. Wollace FDITED BY J. Hadsall DATE FINISHED 7/20/88 TOTAL DEPTH 260 feet GROUND SURFACE EL. 14.1 ft. CHECKED BY D. Hadsall DEPTH 260 feet GROUND SURFACE EL. 14.1 ft.
<u> </u>							SILTY CLAY; medium to dark gray, moist, medium stiff, medium to high plasticity.
‡ ‡	# 14	22/60					,
75 -	·	ļ					
1 1	# 15	25/60					
ļ	#13	23/60					
80 -							SANDY SILTY CLAY; medium gray, wet, medium stiff, medium
\mathbf{b}	# 16	15/60					plasticity.
- 85 -							
F ~7					CL~		
F 7	# 17	10/60			СН		
en -							SILTY CLAY; medium gray, molst, stiff, medium plasticity.
1 1	#10	7/60					gray, many and provide the provided the prov
1	# 18	,,00					
95							
F }	# 19	35/60		İ			
F 7		ĺ					
F ''' T		- 1					SILTY SANDY CLAY; olive gray, wet, medium stiff, low plasticity.
1 1	# 20	4/60					pidandity.
1,0=1							
Ł							SAND; and gravel, medium to coarse grained.
ŀŀ	# 21	0/60			sw		
F 110]			ļ				SAND/GRAVEL; medium to coarse grained, some clayey
F 7	#22	0/60			SC- GC		sands.
F 7	·				30		
- 115 -				Ì			SAND; some gravel, medium to coarse grained.
‡ ‡	#23	0/60			sw		
120							
է ֈ	İ						SAND; scattered gravel, medium grained sand.
FF	#24	0/66			SP		l
125		-					SILTY CLAY; medium gray, moist, very stiff, high plasticity.
F 7	#2 5	44/60					-
ļ 1	,				į		
L130							SILTY CLAY; dark gray, moist, very stiff, high plasticity.
t d	# 26	60,/60			СН		1
<u> </u>							1
135							SILTY CLAY; mottled dark gray and ollve brown, moist, stiff, high plasticity.
F 7	₽ 27	60/60					· · · · · · · · · · · · · · · · · · ·
t,,,1							

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

...Creating a Safer Tomorrow

AutoCAD FILE: HE GB7.DWG

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							BORING NO. GB#7
<u> </u>	ER				۲		· · · · · · · · · · · · · · · · · · ·
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	끨	FIELD GEOLOGIST <u>C. Waliace</u> COORDINATES N. 338.983.7 E. 1,548,070.8
z I	SAMPLE E & NU	CO	WELL SUMMARY	ASU SIS1	SS	PROFILE	FDITED BY J. Hadsall DATE BEGAN 7/18/88
нт чэс	y fi	RE (3 000	SOSO	<u> </u>	CHECKED BY <u>J. Hodsall</u> DATE FINISHED <u>7/20/88</u> . TOTAL DEPTH <u>260 feet</u> GROUND SURFACE EL. <u>14.1 ft.</u>
C	Ę				_		DESCRIPTION
140							SILTY CLAY; mottled medium gray and olive brown, moist,
t d	#28	56/60					stiff, high plasticity.
$\begin{bmatrix} \cdot \end{bmatrix}$							
-145 -		<u> </u>					
t d	#29	60/60					
-							
-150 - 							
t 1	#30	60/60			СН		
- 155 -							
F 4	#31	60/60					
-160							
- -	#32						
FF	#52	60/60					
165							SILTY CLAY, trace sand, medium gray, very molst, soft,
t d	# 33	55/60					medium plasticity.
1	#35	33760			<u></u>		
170					CH-		SILTY CLAY; medium to dark gray, moist, stiff, medium
1 1	#34	57/60					plasticity, trace rootlets.
<u>t</u> <u>1</u>	# 3*	,					
-175							SAND/GRAVEL; medium to coarse grained sand, small to
FF	#3 5	0/60			GW	33	large gravel.
1 1	•					တို့တို	
-180 -						• (e)(c)	SAND; medium to coarse grained sand, scattered gravel.
I	#36	0/60					
F_7							
185					SP		
t d	#37	0/60					
F.,,-							
190							SAND; coarse grained sand with scattered gravel.
‡ ‡	# 38	0/60					
195					sw		
F ~ }							
F 7	# 39	0/60			İ		
200							SANDY SILT; mottled medium brown and olive gray, very
L 1							moist to wet, soft, low plasticity, scattered gravel.
F	#40	8/60			ML		
205							SILTY CLAY; dark gray, molst, very stiff, high plasticity,
t d	, یو	20 /2-					scattered gravel.
F +	#41	29/60			СН		
E2101		l					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

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AutoCAD FILE: ME-GB7.DWG

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					_		BORING NO. GB#7
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N 336,983.7
2'0	# 42	36/60			ML		CLAYEY SANDY SILT; olive brown, very moist, medium stiff, low plasticity.
-215	#43	25/60			ML		CLAYEY SILT; medium gray, very moist, soft, low plasticity, trace sand.
-220	\$ 44	30/60			CL		SANDY SILTY CLAY; medium gray, moist, stiff, medium plasticity.
-225	# 45	4/60			ML		SANDY CLAYEY SILT; olive brown, wet, soft, low plasticity.
-230	# 46	55/60			CL		SILTY CLAY; dark gray, molst, meldum stiff, low to medium plasticity.
235	#47	44/60			ML		CI.AYEY SILT; dark gray, very moist, medium stiff, low plasticity.
-245	#48	43/60			CL		SILTY CLAY; dark gray, moist, stiff, low to medium plasticity, trace sand.
250	#49	54/60					
-255	/ 50	60/60			ML.		CLAYEY SILT; dark gray, very molst to wet, medium stiff, low plasticity.
220	# 51	28/60			CL		SILTY CLAY; mottled brown and gray, moist, stiff, medium plasticity.
							TOTAL DEPTH 260 FEET 4-1/2" diameter boring
270							
275							

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AUTOCAD FILE ME GB7.DW5

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							BORING NO. GB#8
D JEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST C. Wallace EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 253 feet DESCRIPTION COORDINATES N. 336.699.7 E. 1,548,645.9 DATE BEGAN 7/13/88 DATE FINISHED 7/15/88 GROUND SURFACE EL. 16.7 ft.
\mathbf{F}'							SILTY CLAY; dark gray to black, moist, medium stiff, medium plasticity.
- 5	#1	14/60			CL		
E 3	"	, , , , ,					
101	#2	0/60					SAND; dark gray with scattered white, medium to coarse grained, angular to subangular.
-							SAND; black to dark gray, medium grained, subrounded.
	#3	0/60			SP		
20	#4	0/60					No recovery in sampler, no cuttings on shaker.
[]							SILTY CLAY; greenish gray, moist, medium stiff, medium plasticity.
25-	#5	12/60					plusticity.
-30-	# 6	3/60			CL- SP		SILTY CLAY; greenish gray, very moist, medium stiff, medium plasticity, with interbedded sand, dark gray, medium grained subangular.
-35	#7	3/60			GP- CH		GRAVEL; dark gray to black with black sand, medium grained, sub to well rounded with interbedded buff silty clay.
40		4/60					SANDY SILTY CLAY; buff to brown, moist, soft, low plasticity.
	#8	4/60			6 .		
45	# 9	30/60			CL		SILTY SANDY CLAY; buff to grayish brown, very moist, stiff, low to medium plasticty with scattered gravel.
E 3							SILTY CLAY; olive brown, wet, medium stiff, medium to
-50-	# 10	26/60			сн		high plasticity.
- 55	#11	0/60			sc		SAND; dark gray, medium grained rounded, scattered white with fines.
E 3							SAND; dark gray, medium to coarse grained, rounded.
-60	#12	0/60			SP		
65							SILTY CLAY, brown to gray, wet, medium stiff, high plasticity.
[]	# 13	22/60			СН		
70	#14	34/60					SILTY CLAY; brownish gray, moist, medium stiff, high plasticity.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 4



...Creating a Safer Tomorrow

	~	Ī		T			BORING NO. GB#8
SEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	JOSCS SYMBOL	PROFILE	FIELD GEOLOGIST C. Wollage EDITED BY J. Hadsoll CHECKED BY J. Hadsoll TOTAL DEPTH 253 feet DESCRIPTION COORDINATES N. 336.699.7 E. 1,548,645.9 DATE BEGAN _7/13/88 DATE FINISHED _7/15/88 GROUND SURFACE EL. 16.7 ft.
70 -	# 14	34/60			сн		SILTY CLAY; brownish gray, moist, medium stiff, high plasticity.
- 75 -	# 15	0/60			SP		SAND; gray to black, medium to coarse grained, rounded.
80 -	# 16	18/60			CL		SILTY SANDY CLAY; olive brown, moist, stiff, medium plasticity.
85 -	# 17	0/60			SP		SAND; dark gray, medium grained, subrounded.
20	# 18	2/60			CL		SILTY CLAY; brown, moist, stiff, medium plasticity.
95	# 19	15/60					SILTY CLAY; olive brown, wet, stiff, medium to high plasticity.
100	# 20	28/60			СН		
-105	#21	6/60					SANDY SILTY CLAY; olive brown, moist, stiff, medium plasticity.
110	#22	15,′60					
115 -	#23	21/60			Q.		SANDY SILTY CLAY; medium gray, moist, stiff, low to medium plasticity.
120	#24	22 '60			CH		SILTY CLAY; medium to dark gray, very moist, medium stiff, medium plasticity.
-125 -	# 25	14/60					SILTY CLAY; dark gray, moist, stiff, medium to high plasticity.
130	#26	56/60					
135	#27	48/60			СН		SILTY CLAY; dark gray and olive brown, moist, stiff, medium to high plasticity.
E, 1	#28	30/60					SILTY CLAY; dark gray, moist, stiff, high plasticity.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

		<u> </u>					BORING NO. GB#8
SEPTH CLEET	Elektrick advi	RECOURTY.	were se gge vo _t	MERSURED CONSISTENCY (TSF	70 5 %:0 2030	27 20 a a	COORDINATES N 336,699.7 EICHP GLOLOGIST C. Wolface FUTED BY J. Hodsoll
110	#28	30/60	·		СН		SILTY CLAY; dark gray, moist, stiff, high plasticity.
1100	#79	40, 60					SILŤr CLÁY; medium grdy, moist, stíff, low plasticitý.
					! 		SILTY CLAY; dark gray, moist, hard, low to medium plasticity.
	#30	AO 60			GL		
16%	#,31	S8, 60					SANDY SILTY CLAY; dark gray, moist, stiff to hard, low plasticity.
150							
	#32	14,/60					SAND; medium to coarse grained, scattered gravel and
l ing =	#33	0/60					shell fragments.
E,	! 		i i				
	#34	0.60					
	#35	റുത					
180					SW~ SP		SAND; coarse, with gravel and scattered shell fragments.
F 3	#36	0,60					S mb, essiss, into grater and sectored and magnetic
185	#37	0/60					
	# 3₽	0 60					SAND; medium to coarse, with scattered gravel and shell fragments.
	700	0. 00					TSNITY CLĀY; dark gray, moist, hard, high plāsticity, trace
-1714	#39	58, 60			СН		of sand.
	#47	49, 60			CL		SILTY CLAY; dark gray, moist, hard, medium plasticity.
	" /						SAND; medium to coarse, scattered gravel.
- 70%	#41	0.60			SP		
F 1	#42	60/60		}			

DRITTING CO.: Water Development Co. DRITTING METROD: Met Rotary

SAMPLER: S' Core Barrol Wireline Sampler

PROJECT 110.: 409616 CLENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

						T	BORING NO. GB#8
S DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N336.699.7 FIELD GEOLOGIST C. Wallace FOITED BY J. Hadsall DATE BEGAN 7/13/88 CHECKED BY J. Hadsall DATE FINISHED 7/15/88 TOTAL DEPTH 253 feet GROUND SUPFACE EL. 16.7 ft. DESCRIPTION
	#42	60/60			СН		SILTY CLAY; dark gray, moist, hard, medium to high plasticity.
-215 -	#43	48/60					CLAYEY SILT; dark gray, very moist, very stiff to hard, law plasticity, trace sand.
 - 220 - 	#44	23/60			ML		CLAYEY SILT; dark gray, moist, very stiff, low plasticity,
-225 -	#4 5	48/60					some sand. SILTY CLAY; dark gray, moist, very stiff, medium plastic.
230	#46 	50 /60			CI.		SILTY CLAY; dark gray, moist, hard, low plasticity.
-235-	#47	38,/60					SAND; medium to coarse with gravel.
247	#48	0/60			SP		·
245	#49	0,/60				777.	SILTY SANDY CLAY, dark to medium gray, moist, stiff,
750	#50	60/60			CL		law to medium plasticity.
255							TOTAL DEPTH 253 FEET 4-1/2 diameter boring
260							
263							
2-0							
275							
\mathbb{E}_{css}							

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB8.DWG

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...Creating a Safer Tomorrow

						П	BORING NO. GB#9
O DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N. 136.157.4
0	:				CL		SANDY LOAM; light brown, dry, soft. SILTY CLAY; dark gray, moist, stiff, minor sand.
5 -							
10	₽ 1	0/60			င		SANDY CLAYEY GRAVEL; light to medium gray, wet, coarse angular pebbles and loose sand.
15	#2	15/60		1.0			SANDY CLAY; light to medium gray, moist to wet, soft, moderately plastic, grading to silty clay.
20	# 3	0/60					
25	#4	0/60					SANDY CLAY; light to medium gray, wet, soft, interbedded with coarse sand.
30	# 3	14/60		1.5			SILTY CLAY; medium to dark gray, moist, soft, moderate plasticity.
35	#6	23/60		0.5- 3.0			SANDY CLAY; light to medium gray, moist, soft, slightly plastic. SILTY CLAY; brown gray, moist, soft, slightly plastic.
40	# 7	0/60			CL		
45	# 8	8/60		0.5- 1.5			
50	1 9	27/60		0.5			SANDY CLAY; medium brown, wet, soft, increasing sand.
-55	# 10	31/60					
60	#1 1	17/60		0.5- 1.5			CLAY/SILTY CLAY; gray brown, moist, stiff, slightly plastic.
65	# 12	6/60		2.0			SANDY CLAY; medium brown, moist, stiff, moderately plastic.
$[E_{70}]$	# 13	20/60					CLAY; medium brown, moist, stiff, moderately plastic.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB9.DWG

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	α		, " " <u>" " </u>				BORING NO. GB#9
JEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D. Cox EDITED BY J. Hodsall CHECKED BY J. Hodsall TOTAL DEPTH 253 feet DESCRIPTION COORDINATES N. 136.157.4 E. 1.548.016.0 DATE BEGAN 7/7/88 DATE FINISHED 7/12/88 GROUND SURFACE EL 19.6 ft.
70 -	# 13	20/60		3.5- 2.5			SANDY CLAY; gray brown, moist, stiff, slightly plastic.
- 75 -	# 14	21/60		2.5			SILTY CLAY; light to medium gray, moist, medium to slightly plastic, increasing sand.
- 80 -	# 15	13/60		3.0- 1.5	CL		SANDY CLAY; light to medium gray, moist, stiff, moderately plastic, minor gravels assoc.
85 -	# 16	27/60		3.5- 4.0			SILTY CLAY; brown gray, moist to slightly dry, stiff, slightly to non-plastic, becoming sandy, increasing moisture content.
90 -	≱ 17	24/60		3.0- 1.5	ML		SANDY CLAYEY SILT; brown gray, moist, stiff, modrately to slightly plastic.
95 -	# 18	3/60		0.5			SANDY CLAY; medium brown, moist, stiff, slightly plastic.
-100 -	<i>#</i> 19	16/20		1.5			SILTY CLAY; medium browm gray, moist, stiff, slightly plastic.
105 -	# 20	22/60		1.0- 1.5	CL		
110 -	#21	48/60		3.5- 1.0			SILTY CLAY; gray brown, moderately hard, dry to moist, non-plastic.
-115 -	#22	53/60		3.5			
120	# 23	24/60		2.5	сн		SANDY CLAY; gray with brown mottles, wet, stiff, highly plastic, rounded pebbles and coarse sand.
-125 -	# 24	0/60			SP		SAND; coarse.
130	# 25	60/60		2.0-			SILTY CLAY; medium gray, moist to wet, stiff, moderately plastic.
135	# 26	60/60		2.5- 3.0	CL		
E,40	#27	60/60			1		

DRILLING CO.: Water Development Co.

DRILLING METHOD: Mud Rotary

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB9.DWG

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...Creating a Safer Tomorrow

					r –		BORING NO. GB#9
DEPTH N FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST_D. Cox FIELD BY_J. Hadsall CHECKED BY_J. HADSALL CHECKED BY_J. HADSALL
-140 -	#27	60/60		2.0			SILTY CLA'r; medium gray, moist to wet, very stiff, non to moderately plastic.
145	#28	ND		2.0- 4.0			
-150	# 29	60/60		2.5			
155	# 30	60/60		2.0	CL		
160	# 31	60/60		2.0- 4.5			
165	#32	40/60		3.0 2.5			
1.70	#33	60/60		3.0- 2.5			
- 175	#34	48/60		3.0	СН		SILTY CLAY; dark gray, moist to wet, very stiff, highly plastic.
· iàu	/35	48/60		4.5- 3.5	CL		SILTY CLAY; pebbly, olive gray, moist to wet, very stiff, low plasticity, angular 1" diameter pebbles.
- 185 - 1	# 36	0/60					SAND; coarse grained. Description made from shaker sample. Sand is probably the derivative of a clayey sand.
:50	# 37	0/60			SC		
- 195	# 38	8/60		1.0	CL		GRAVELLY SILTY CLAY; dark gray, wet, stiff, slightly to moderately plastic.
200	# 39	6/60		1.0	ML		SANDY CLAYEY SILT; medium brown, wet, stiff, slightly plastic, with clasts up to 1" diameter (minor).
-205-	#40	18/80		1.5- 4.5	CL		SILTY CLAY; dark gray, moist, very stiff, slightly to moderately plastic, with minor coarse grained sand and pebbles.
F _{21/1}	#41	60/60					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF+GB9.DWG

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...Creating a Safer Tomorrow

	Τ	T	T			Т	DODING NO CD#O
1 5	8] _		BORING NO. GB#9
FEET	MPLE & NUMBER	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	۳	FIFLD GEOLOGIST D. Cox COORDINATES N. 336.157.4
7	SAMPLE TYPE & NUN	δ z	WELL SUMMARY	ASUR SISTE	Š	PRCFILE	FDHED BY J. Hadsall DATE BEGAN _7/7/88
EP 74	N N	RE ~		CONS	USCS	ă	CHECKED BY J. Hadsail DATE FINISHED 7/12/88
1 7	}				⊃		TOTAL DEPTH 253 feet GROUND SURFACE EL. 19.6 ft.
- 210 -		 			-	1111	DESCRIPTION SILTY CLAY; gray with brown mottles, moist, very stiff,
ļ	#41	60,/60	[3.5			moderately plastic.
			1		l		
215 -	#42	60/60		3.5	CL.		
-	#42	100,00	ļ	3.3			
1: :	<u> </u>	ļ	1	<u> </u>			
-220-	#43	30/60		3.0-			
	#+3	30,00		3.0-	ML		CLAYEY SILT; medium gray, wet, slightly plastic, sandy.
						₩	SILTY SAND; medium gray, wet (saturated), loose, some
- 225 -	#44	8/60		0.5			pebbles.
-		0,00		0.3	SM		
1 7							
-230-	# 45	0/60					
1 1	#43	0/60					SANDY SILT; medium gray, wet (saturated), loose.
t. 3							
-235 -	•40	- /			ML		
1 1	# 46	3/60	İ				
				·			SANDY GRAVEL.
-240-		0./50	i i		GM		
1 1	#47	0/60			GM	HH	
1 1				}			SILTY CLAY; dark gray, moist to wet, stiff, moderately to
245		40 /00					slightly plastic, with angular pebbles to 1" diameter.
1 1	#48	18/60					
t t					CL		SILTY CLAY; dark gray, moist to wet, stiff, low to
- 250 -		70 /00		ļ			moderate plasticity, trace sand.
1 1	# 49	30/60					
<u> </u>				-+		7777.	TOTAL DEPTH 253 FEET
-255							4-1/2' diameter boring
‡ 1							
<u></u>		.					
260		Ì		j	İ		
!		ļ					
├ ┤				Ì			
-265-		ľ					
t. 1	1						
1 +	ļ			- 1	ļ		
270		ŀ					
t d				1			
F -		1					
275				- 1			
<u> </u>						j	
[]					- 1		
t2801]						
L280 L		l					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: ME-GB9.DWG

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...Creating a Safer Tomorrow

		T	<u> </u>				BORING NO. GB#10
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hodsall TOTAL DEPTH 250 feet COORDINATES N. 335,503.7 E. 1,548,645.3 DATE BEGAN 7/27/88 DATE FINISHED 7/28/88 GROUND SURFACE EL. 20.7 ft.
- 0-						FIFT	DESCRIPTION Top soil and subgrade; logged from auger cuttings.
5 1 1	#1	0/60			GM		SANDY GRAVEL; black to tan, loose, angular to subrounded silty, clayey. Logged from hand sieves.
10							
	#2	14/60			СН		SANDY SILTY CLAY: grading to sandy clay, mottled gray and dark and light gray gray, very soft to soft, high plasticity, sand is fine to very fine, trace of gravel. GRAVELLY SANDS; black to tan to white, loose, sand is medium to fine grained, subangular to subrounded.
	#3	0/60			sw		Gravel is angular to subangular, relatively clean. Logged from shaker and hand sieve.
-20 - - -25 -	#4	0/60			sc		CLAYEY GRAVELLY SANDS; black to tan to white, some fines, sand is coarse to fine grained, angular to subrounded, gravel is angular to subangular. Logged from shaker and hand sieve.
	# 5	16/60					SANDY SILTY CLAY; dark gray, moist, very soft to stiff, high plasticity, moist, sand is fine to very fine grained.
-30 -	# 6	14/60			СН		SILTY CLAY; dark and light gray with brown, molst, soft, high to moderate plasticity, trace of fine sands.
-35 -	- #?	12 60					SANDY SILTY CLAY; dark gray with light gray spots, slightly moist, stiff, medium to high plasticity, sand is fine to very fine, trace of green/gray organic fibers.
.10					SW		SAND; some clay, trace of gravel, sand is rounded to subangular, black to tan, coarse to medium grained.
45	#8	0 60					CLAYET SATING GRAVEL; gray to light brown, sand and gravel angular to subrounded, sand is coarse to fine grained, many cemented particles.
	#3	O Jeo			GC		Logged from hand sieves.
50-1	#10	0/60					SANDY GRAVEL: with some fines, brown to light brown/tan sand is coarse to fine grained, subangular to subrounded, gravel is angular to subangular, few particle cementations.
53					GM		
	#11	0,60					Logged from hand sieve and shaker.
-60	#12	0/60			-	7 M T.M	CRAVELLY SAND; with some fines, black to light brown, sand is coarse to fine, subangular to rounded, gravel is black to gray, angular to subrounded.
65	#13	0/60			sw		logged from hand sieve.
L 70 J	1						

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB10.DWG

...Creating a Safer Tomorrow

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					-		BORING NO. GB#10
JEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	WEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED B: J. Hadsall TOTAL DEPTH 250 feet DESCRIPTION COORDINATES N. 335,503.7 E 1,548,645.3 E 1,548,645.3 DATE BEGAN 7/27/88 DATE FINISHED 7/28/88 GROUND SURFACE EL. 20.7 ft.
- 70 -					514		GRAVELLY SAND.
- 75	#14	10/60			SW CH		SANDY CLAY; grading to sandy gravelly clay, brown with tan spots, moist, soft, high plasticity, sand is fine, black, gravel is angular, black, 1/4" in size. CLAYEY SILT; grading to sandy clayey silt, brown with gray
- 80 -	# 15	60/60			ML		spots, slightly maist, soft to stiff, moderate to low plasticity, sand is fine to very fine.
85 -	# 16	32/60					Moisture and plasticity increase with depth. SILTY GRAVELLY SAND; black to brown, sand and gravel is
	#1 <i>7</i>	0/60			SM		subangular, sand is coarse to medium, frequent particle cementation. Logged from hand sieve.
90 -	#18	20/60			СН		SILTY SANDY CLAY; mottled gray and brown, moist, very soft to soft, high plasticity, sand is fine grained. SILTY GRAVELLY SAND; black to light brown, sand is coarse to fine grained, angular to rounded, grayel is angular to
95 -	#19	0/60			SM		subangular, dirty. Logged from hand sieve and shaker.
-100 -	#20	30/60			сн		SILT? CLAY; mottled gray and red brown, slighty moist, soft, high plasticity, trace of sand and gravel.
105	#21	60/60			ML- SM		CLAYEY SILT: grading to silty sand, dark gray with brown, patches, slightly moist to dry, soft to stiff,, low to no plasticity, sand is fine to very fine.
-110	#22	18/60			SM CH		SILTY SAND; grading to almost pure clay, sand is black- gray, fine to very fine grained, moist, low plasticity, CLAY; gray, very stiff, dry, high to very high plasticity. GRAVELLY SAND; black to gray, charse to fine grained,
115	#23	12/60			sw		angular to subangular.
[]			1	Ì			
- 120 	#24	52/60			ML		CLAYEY SILT; gray with brown patches, slightly moist to dry, stiff, medium plasticity, trace of fine to very fine sands.
- 130	#25	28/60			сн		SILTY CLAY; dark gray, soft to dry, stiff, high plasticity, trace of fine sand.
- - - -	#26	60/60			CL		SILTY CLAY; dark gray, slightly moist, soft to stiff, medium plasticity.
135	#27	55/60			СН		SILTY CLAY; grading to sandy silty clay, mottled dark gray and brown, slightly moist, stiff, medium to high plasticity, sand is medium to fine grained, black.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF -GB10.DWG

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...Creating a Safer Tomorrow

	~						BORING NO. GB#10
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N. 335,503.7 EDITED BY J. Hadsall DATE BEGAN 7/27/88 CHECKED BY J. Hadsall DATE FINISHED 7/28/88 TOTAL DEPTH 250 feet GROUND SURFACE EL. 20.7 ft. DESCRIPTION
- 140 -	#28	60/60			ML-		SILTY CLAY; light and dark gray with brown spots, slightly moist, soft to stiff, medium to high plasticity.
-145	#29	36/60			CL		CLAYEY SILT; grading to sandy clay, clayey silt is light and dark gray with brown spots, slightly moist to dry, stiff, low plasticity. Sandy clay is dark gray, stiff, medium plasticity, sand is fine to very fine.
150-	#30	60/60			CL-		SANDY CLAY; grading to clay-silty clay, sandy clay is dark gray, moist, soft to stiff, medium plastic. Sand is fine to very fine grained. Silty clay is mottled dark gray and dark brown, stiff, slightly moist, high plasticity.
-155	#31	60/60			MI.		CLAYET SILT; grading to sandy clay, clayey silt is mottled light and dark gray and dark brown, slightly moist to dry, stiff to very stiff, low plasticity. Sandy clay is light brown, soft to stiff, moist, high plasticity, sand is medium to very fine grained.
145	#32	0/60			SM SC		CLAYEY SILTY SAND; dirty, some gravel, black to gray, coarse to fine, subangular to rounded, some gravel.
	#33	0/60			SW		SAND; black to gray to tan, coarse to fine grained, sub- angular to rounded, predominantly clean, trace of gravels.
F =	#.34	34, 60			СН		CLAY/SILTY CLAY; dark, steel gray, slightly moist, stiff to very stiff, medium to high plasticity.
	#35	0,∕60			sw		SANDS: Mack to gray, coarse to fine grained, somewhat clayey, subangular to subrounded, obvious shell fragments, (>10%)
- '80 - - -	#36	0/60			SM		CLAYEY SILTY SAND; dirty, black to tan, coarse to fine grained, angular to subrounded, trace of gravel, some shell fragments. Logged from shaker and sieves.
-185 	#37	36/60			CH CH		GRAVELLY SANDY SILT/CLAY; grading to silty clay, dark gray, slightly moist, stiff to very stiff, medium to high plasticity, sand is fine grained, gravel is rounded, trace of shell fragments and organic fibers. SANDS: somewhat dirty, black to light brown, medium to
- '95	#38	0,/60					fine grained, subangular to subrounded, some shell fragments, somewhat silty, clayey.
200	# 39	0/60			SW		
205	#40	0/60					SANDS; clean, black to light brown, coarse to fine grained, subrounded to rounded, trace of gravel and shell fragments.
210	#41	10/60			ML		CLAYEY SANDY SILT; medium brown, stiff, very moist, low to medium plasticity, sand is fine to very fine grained.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California ...Creating a Safer Tomorrow

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: ME-GB10.DWG

		Ι				Γ	BORING NO. GB#10
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	TOBPUS SOST	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 250 feet DESCRIPTION COORDINATES N. 335,503,7 E 1,548,645.3 DATE BEGAN 7/27/88 DATE FINISHED 7/28/88 GROUND SURFACE EL 20.7 ft.
- 210 -	#42	0/60			GP		SAND? GRAVEL; clean, black to tan, sand is coarse to medium grained, subrounded to rounded, gravel is angular to subrounded.
- 215 -	#43	0/60				• • • •	GRAVELLY SAND; mostly clean, black to light brown, sand is coarse to medium grained, subrounded to rounded, gravel is angular to subrounded, trace of shell fragments.
-220-		0,00					Logged from shaker and sieves.
- 225	\$ 44	0/60			sw		
	# 45	0/60					
230	# 46	0,/60					
-235-	#1°	60/60			г г		SANDY CLAY; light brown, moist, stiff, medium plasticity. CLAYEY SILT; gray with brown spots, dry, stiff to very stiff low plasticity, blocky, trace of mica. SANDY CLAY; light brown, moist, stiff, medium plasticity.
-240-	#48	60/60			ML		CLATET SILT; mottled dark gray and dark greenish brown, very stiff, slightly moist to dry, low plasticity, blocky stucture.
	# 49	50/60					·
250						111111	TOTAL DEPTH 250 FEET 4-1/2' diameter boring
- 2 55-				-			
260							
-265							
270							
275							
$\begin{bmatrix} \\ 280 \end{bmatrix}$							

DRILLING CO.: Water Development Co.

DRILLING METHOD: Mud Rotary

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB10.DWG

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...Creating a Safer Tomorrow

							BORING NO. GB#11
D EPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N. 335.839.0 FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hodsall TOTAL DEPTH 255 feet DESCRIPTION COORDINATES N. 335.839.0 E 1,548,801.0 DATE BEGAN 7/21/88 DATE FINISHED 7/25/88 GROUND SURFACE EL. 18.8 ft.
- 0 -							First 5 ft. sandy gravelly silt, brownish gray, slightly moist, fill material, gravel is gray, from 1" to 1/4".
E 3				:			4 to 4.5 ft. casing stopped; gravel fill lens.
5 -							GRAVELLY SAND; sand is coarse to medium grained, black
‡ =	gF1	0/60			SW		to white, gravel is gray and black, clean sands and gravels.
[10]							
t :	# 2	0/60					
15-							SILTY GRAVELLY SAND; sand is fine to very fine grained,
E 3	#3	0/60					black and dark gray, trace of silt and gravel.
20-							CUTY CAND, and to the Assessment Security and
1	#4	0/60			SM		SILTY SAND; sand is fine to very fine grained, black and dark gray.
	#4	0/80					
- 25 -							
$E = \frac{1}{2}$	#5	10/60					
- 30					ML		CLAYEY SILT; mottled gray and it. brown, moist, mod. plas. SILTY CLAY; tan and light gray, moist, soft to stiff, high plasticity.
‡ ‡	#6	10/60			СН		productly.
35							SAND; very fine to coarse grained, well graded, dirty-trace
$E = \frac{1}{2}$	# 7	0/60					of silts, black to dark gray and tan.
40					sw		CDANELLY CILTY CAMP, and in namework districted
ļ ‡	#8	0/60			3"		GRAVELLY SILTY SAND; sand is somewhat dirty, well graded, coarse to very fine grained, black and gray, gravel is coarse angular, black and dark gray.
F. 4	#0	0/80					digital, black diff dalk gray.
-45							CLAYEY SILT; tan to brown, soft, moderate plasticity.
<u> </u>	#9	5/60			ML		
50 -						шШ	GRAVELLY SAND; clean, coarse to medium grained sand, angular, black and gray, gravel is angular, black to light
F ‡	#10	0760			SW		gray.
55		-					SILTY SAND; sand is medium to very fine grained, black to
<u> </u>	#11	0/60			SM		dark gray, with fines.
-60							SILTY CLAY; tan with some light gray, very moist, soft to
† ‡	#12	18, 60			СН		stiff, high plasticity, some fine sand cemented fragments interspersed.
65	π' *	. 5, 55					
	`						GRAVELLY SANDS; sands coarse to fine grained, angular, and subangular, black to gray, gravel is interspersed but
‡ ‡	#13	0,60			SW		not prevalent, dark to light gray.
$L_{70} \bot$	i					لـــا	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Navel Air Station Moffett Field, California

AutoCAD FILE: MF-GB11.DWG

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...Creating a Safer Tomorrow

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	,	r=		<u> </u>			DODING NO CD //11
) _E		•		ب		BORING NO. GB#11
FEET	SAMPLE	λ.		MEASURED CONSISTENCY (TSF)	SYMBOL	ч	COORDINATES N. 335,839.0
Z	4 ×	RECOVERY	WELL SUMMARY	STE	SΥ	PROFILE	EDITED BY J. Hadsall DATE BEGAN 7/21/88
DEPTH IN	SAN	REC (SoNS €	uscs	g.	CHECKED BY J. Hodsoll DATE FINISHED 7/25/88
J.E	1 5				ä		TOTAL DEPTH 255 feet GROUND SURFACE EL 18.8 ft.
- 70 -						1111111	DESCRIPTION CLAYEY SILT; dark gray to light gray, moist, stiff, low
t :							plasticity.
┣ -	#14	18/60					
- 75 -					ML		CLAYEY SILT; tan with some light gray and brown, dry to
t :							slightly moist, very stiff, low plasticity.
	# 15	48/60					
- 80 -	ļ						SAND; clean, black and brown to black, medium to very
<u> </u>							grained, subangular.
F -	#16	0/60					
- 85 -	L				SP		
t :	1						
F -	# 17	0/60					
- 90 -							SAND; well graded, coarse to very fine grained, subrounded,
- -							to rounded, black to gray, some cementation of smaller
F -	# 18	0/60					grain sizes, predominantly clean, some shell fragments.
95 -					SW		
┝"-					•		
-	# 19	0/60					
100	:						
- "							SAND; black to dark brown, poorly graded with trace of fines, sand is medium to fine grained, mostly clean.
ļ :	#20	0/60					
105 -							i
F -							
	# 21	0/60			SP		
110-							
- "-	!						GRAVELLY SAND; black to dark brown, sand is coarse to fine grained, angular to subrounded, gravel is angular.
	#22	0/60					
-115 -							
- '''				[SAND; with some gravel, black to tan, sand is coarse to medium grained, angular to subangular to subrounded,
	#23	0/60			sw		clean.
L,20				İ			
120-				ĺ			GRAVELLY SAND; traces of fines, sand is coarse to fine grained, angular to subrounded, black to tan, gravel is black
t :	#24	0/60					to gray, angular to subangular.
-					SP		
- 125 -					3P		Traces of shell fragments—sand sized.
	#25	0/60					İ
-		j					
-130 -						 	CLAYEY SILT; dark solid gray, slightly moist, stiff,
<u> </u>	#26	0/60					moderately plastic.
F -				į			
135				ĺ	ML		CLAYEY SILT; mottled dark gray and brown, slightly moist,
 	# 27	60/60					stiff to very stiff, moderate plasticity.
							i
L 140 -	1					шш	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

...Creating a Safer Tomorrow

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		T				ľ	PODING NO CD//11
1	띭			,	ನ		BORING NO. GB#11
FEET	MPLE & NUMBER	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	삘	FIELD GEOLOGIST S. Logan COORDINATES N. 335.839.0
z r	SAMPLE E & NU	8 ≥	WELL SUMMARY	LASU ISIST		PROFILE	EDITED BY J. Hadsall DATE BEGAN 7/21/88
EP TH	Ş. ⊒	8		<u>₹</u> 6	uscs	۵.	CHECKED BY J. Hodgoll DATE FINISHED 7/25/88 TOTAL DEPTH 255 feet GROUND SURFACE EL. 18.8 ft.
,	⊨				_		DESCRIPTION
140-		1					CLAYEY SILT; mottled dark gray brown and tan, slightly
t -	#28	55/60					moist, stiff, low plasticity.
F]					
-145-					ML		CLAYEY SANDY SILT; solid dark gray, mottled brown in some
L :	#29	60/60					zones, moist, stiff to very stiff, low to moderate plasticity, <5% sand.
- 150 -		İ					
F'~-							SILTY CLAY; dark gray throughout, dry to slightly moist, stiff, moderately plastic.
	#30	60/60			CL		etti, illossi ettiy pidatte.
155							
							CLAYEY SILT; grading to sandy clayey silt, mottled dark and light gray and dark brown, grading to light and dark
1	#31	54/60		l			gray, moist, very stiff, low to moderate plasticity.
160							
- -							
FF	#32	20/60		ŀ			
- 165					ML		
t 1							CLAYEY SANDY SILT, grading to clayey silt, mottled light and dark gray, slightly molst, moderate plasticity, some sand
1	#33	55/60					nodules (Mn/Fe7), blocky stucture. Thin gravel/sand layer at 165'.
F170					ı		SANDY SILT; grading to gravelly sandy silt, dark gray, moist,
1 1	#34	4. (20)					low plasticity, stiff to very stiff, sand is medium to fine
1	#U4	46./60			ı		grained, black, prevalent shell fragments in last 2'.
-175				-	-	H'H	SANDY SILTY GRAVEL; gravel from 3" to 1/4", sand is
FF	#35	4/60		ŀ	СМ		coarse to medium, some cementation, sand is black and gray, gravel is black, gray to tan.
1 1	,,	', "			J.W.		gray, graver is black, gray to tan.
180		! -		-		លល	GRAVELLY SANDS; black and tan, dirty, sand is medium
F -	#36	0/60		İ	sw		grained, angular to subangular, gravel is subangular to subrounded, prevalent shell fragments.
F 7				1			and the second s
185				-			SANDY CLAY; grading to gravelly sandy clay, wet, soft, high
t d	#37	24/60		- 1	сн		plasticity, sand is medium to fine grained black, gravel is gray, subrounded.
F7							j
190				-			SLTY SAND; to silty sandy gravel, black to light gray, sand
1 1	#38	0/60			SM		is coarse to fine grained, dirty, subangular to rounded, gravel is black to tan, some shell fragments.
195					_		
F ~ T							SILTY CLAY; grading to sandy silty clay, mottled dark gray and dark brown, moist to very moist, high plasticity,
F 1	#39	54/60			СН		sand from 10 to 1mm in diameter, subrounded brown to
200							light gray.
<u> </u>	İ						SILTY CLAY; mottled dark gray and brown, medium plasticity, moist, blocky structure, grades to a clayey silt, mottled
F 7	#40	60/60		ĺ	CL		light and dark gray, stiff, low plasticity.
205							
<u> </u>				ľ			CLAYEY SILT; mottled brownish gray, cream gray, dark gray, slightly moist to dry, thin gravelly layer (~212 ft. — 2"
FF	4 41	60/60			ML		thick).
t 210 1				\perp			

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB11.DWG

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... Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

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		T			1	1	DODING NO CD //11
E	2	1			ہ ا	l	BORING NO. GB#11
S DEPTH A FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS STABOL	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 255 feet DESCRIPTION COORDINATES N.335,839.0 E.1.948,021.0 E.1.948,02
- 210	#42	42/60			СН		SILTY CLAY; grading to sandy silty clay with depth, streaked light brown in dark gray to plain dark gray with depth, very moist, soft to stiff, medium to high plasticity, sand is black, fine to very fine, not more than 10% sand in last 2 ft
220-	#43	50/60			CH-		SANDY SILTY CLAY; (1 ft. thick) grading to clayey silt, sondy silty clay is dark gray, very moist, high plasticity, sand is fine to very fine grained, clayey silt is mottled light gray and dark brown, slightly moist, low plasticity, trace of sand.
-225	#44	48/60			ML		CLAYEY SILT; mottled dark and light gray and dark brown, dry to slightly moist, trace of black sand nodules (2mm) <1% sand
730	# 45	40/60			M.		CLAYEY SILT; with interbedded gravelly sandy silt layers to 3" thick, moist to very maist, stiff to very stiff, low plasticity gravel is subrounded, black and brown, sand is medium to fine grained, black to tan, clayey silt is mottled gray and light brown, some particle comentation present.
- 235	#46	4/60			SM- ML		GRAVELLY SILTY SAND; with sandy slit lens, sandy slit is dark gray, very molst, soft, gravelly sand is dirty, black to tan, sand is coorse to medium grained.
240-	# 47	36/40			ML		SANDY SILT; grading to clayey silt, mottled dark gray and brown grading to dark, deep gray, dry to moist, stiff, sand is fine to very fine grained, black.
	#48	20/60		:			SILTY CLAY; thinly bedded, dark gray, dry, stiff, medium plasticity.
245~	# 49	60/60			CL		SILTY CLAY; dark gray to mottled dark and light gray, trace of sand, moist to slightly moist, medium plasticity.
250	#50	60/60					Same as above except with medium to high plasticity.
-255							TOTAL DEPTH 255 FEET 4-1/2" diameter boring
260-							
265							
270							
275							
E 280]			[

SAMPLER: 5' Core Barre! Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: VF-GB11.DVG

PAGE 4 OF 4



... Creating a Safer Tomorrow

	~		-				BORING NO. GB#12
JEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	WEASURED CONSISTENCY TSF	USCS SYMBOL	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 253 feet DESCRIPTION COORDINATES N. 335.819.1 E 1.548,307.5 DATE BEGAN 8/1/88 DATE FINISHED 8/3/88 GROUND SURFACE EL. 20.1 ft.
7	#1	0/60					FILL; gravel and fill material, 1.0—1.5 ft. lens of quartz, feldspar, rock material.
	#2	0/60			GM		SILTY SANDY GRAVEL; poorly sorted gravel, gray rounded, sand is coarse to medium grained.
10	# 3	0/60			SM		GRAVELLY SILTY SAND; black to gray, poorly sorted, coarse to medium grained, rounded to subrounded, quartz feldspar rock lens at 14-14.5 ft
15	W 2					350	SANDY GRAVEL: clean, black to light gray, gravel is angular to subrounded, sand is coarse to fine grained.
-20-	#4 	0/60			GW	777 25.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3	SANDY CLAYEY GRAVEL: black to gray, soft, high
	# 5	0/60			GC		plasticity, sand is coarse to fine grained, gravel is well sorted, rounded to subangular, some shell fragments.
	# 6	30 AN		1.25	СН		SANDY SILTY CLAY; grading to silty clay, mottled gray and light brown to dark gray, slightly moist, soft, high to very high plasticity, sand is medium to fine grained.
-30	#7	0/60			CL		GRAVELLY SAND CLAY; gray, very soft, medium to high plasticity, sand is coarse to fine grained, black and gray, gravel is well sorted, angular to subround.
- 75 -	#8	0/60			sw		SANDS; trace of gravel and fines, all earthen colors, coarse to very fine grained, angular to subrounded, some cementation of particles.
-40 -	# 9	0/60			SC-		CLAYET SANDS AND GRAVELS; black to tan, sand is coarse to medium grained, angular to subangular, gravel angular to subangular.
; s	#10	22/60		1.0	СН		SANDY SILT? CLAY; light brown, slightly moist, soft to stiff, high plasticity, sand is fine to very fine grained.
	#11	24, '60		3.7	ML		CLAYEY SILT; light brown with dark and light gray spots, dry, stiff to zery stiff, low plasticity, trace of rounded gravel.
55							SILTY CLAY; brown, slightly moist to moist, stiff, high to very high plasticity, trace of fine sand.
-60	#12	26/60		1.05	сн		SANDY SILTY CLAY; light brown, moist, very soft to soft, very high plasticity, sand is fine to very fine grained, trace
65	#13	18/60		0.30			of medium grained sand. CLAYEY SILT; mottled light brown and light gray, moist,
F	#14	10, 60		2.5	ML		very stiff, low to medium plasticity, sticky.

DRILLING CO.: Water Development Co.

DRILLING METHOD: Mud Rotary

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

PAGE 1 OF 4

... Creating a Safer Tomorrow

_			,			,	,	
	_	œ					İ	BORING NO. GB#12
- [FEET	SAMPLE	}_		a5 -	SYMBOL	l	COORDINATES N. 335,819.1
		ÄŽ	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY	₹	PROFILE	FIELD GEOLOGIST S. Logan COORDINATES N. 335,819.1 E 1,548,307.5
	Z.	AMS	000		L SSS SS		မို့	FOLTED BY J. Hadsall DATE BEGAN 8/1/88
	DEPTH IN	SA	ž.		≥ 8	USCS	"	CHECKED BY J. Hodsall DATE FINISHED 8/3/88 TOTAL DEPTH 253 feet GROUND SURFACE EL. 20.1 ft.
ŀ	D	ί <u>-</u>			1			
-	70 -		+	,	+	-	IIIIII	DESCRIPTION CLAYEY SILT; with gravel, grading to silty clay, mottled
F	4		24/00		0.75- 2.0		ИШ	gray and brown, dry, stiff, low to high plasticity,
ŀ	-	#15	24/60		2.0			gravel is gray, angular to subangular.
	75 I				ļ	ML		
┢	-				1			SANDY CLAYEY SILT; brown with light gray spots, dry, stiff to very stiff, dry, low to medium plasticity, sand is fine to
Ė		# 16	44/60		2.0- 2.6			very fine grained.
ŀ.			1 1		1			
Ţ,	®≎ 							SANDS; black and brown, subrounded to rounded, coarse
ŀ	┪	#17	0/60			SW		to fine grained, clean.
ţ		"	', '			J		
۶ -	35 -						mili	SILTY SAND; grading to silty clay, sand is medium to fine
Ţ	7				0.50	SM	Ш	grained, black, dirty, clay is dark gray with brown spots,
ŀ	4	#18	10/60		0.30	SM CH	Ш	dry, soft, high plasticity.
Ļ	₂₀		ļ			ļ	Щ	ARTIMITIC ALL POLICIES AND ALL POLICIES
F	-		1 1				1111	GRAVELLY CLAYEY SAND; light brown to black, sand is coarse to fine grained, angular to rounded, gravel is angular
Ė	1	#19	0/60					to subrounded.
ŀ.			l i		Ι.			
֓֞֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	⁹⁵ 🕇				l i			
-	\dashv	#20	0/60					
Ţ	1	,	.,					
- 10	00 -	-				sc		GRAVELLY CLAYEY SAND; brown medium plastic, sand
Ė	1							is black to gray, subangular to rounded, coarse to fine
F	4	#21	0/60					grained, gravel is poorly sorted, angular to subangular.
L 10	25 7						100	
F	\dashv			ŀ				
ļ	-1	#22	0/60					
H.,								
[]	"†					-		SILTY CLAT: mottled light gray, dark gray and dark brown,
┢	┪	/ 23	60/60		3.0	CL		moist, very stiff, medium to high plasticity.
F	1	·						
-11	15 🕂				 			CLAYEY SANDS; black to gray, coarse to fine grained,
F	7							angular to subangular, trace of gravel.
ŀ	\dashv	#24	u∑.eu				13.00	
-12	·0 -					sc		CRAVELLY COURS with same for the last
ŀ	4		j					GRAVELLY SAMD; with some fines, black to gray, coarse to fine grained sands, subangular to subreunded, gravel is
F	7	#25	0, 80					angular to subrounded.
-12	+]	- 1				H	1
F ''	`-	Ì	1		[•		CLATER SLT; grading to clay, silt is light brown with gray
Ł	4	#26	54,760		1.5	MI.		spots, slightly moist to dry, stiff, low plasticity.
F	7		·]			- 1		1
L ¹³	rt n							CLAY; grading to silty clay, dark gray with dark brown spots
F	7	42,	54 '60		3.0-	Cu		moist to slightly moist, very stiff, high to medium plasticity.
t	\exists	#27	54,'60		3.0- 3.75	СН		1
-13	5 -							CLAYER SILF. COMICA dest and the first transfer
t i	1	j	ł		2 25			CLAYET SILT; mottled dark gray and dark brown, slightly molst, very stiff, low to no plasticity.
F	7	#≘स	60/60		2.25- 3.70	ML.		
L	Ι'n							ļ
- 14	,, —							

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409615

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-G812.DWG

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...Creating a Safer Tomorrow

٠,		,					BARTIC NA CRINC
	ρx			1	١.		BORING NO. GB#12
FEET	SAMPLE	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	H.	COORDINATES N. 335.819.1 FIELD GEOLOGIST S. Logan E 1,548,307.5
Z.	MP. N	SOVE F	WELL SUMMARY	A SUL	\ \Z	PROFILE	EDITED BY J. Hadsall DATE BEGAN 8/1/88
DEPTH IN	SAI	RE /		SOR	USCS	ă	CHECKED BY J. Hodsall DATE FINISHED 8/3/88
ä	ξ				٦		TOTAL DEPTH 253 feet GROUND SURFACE EL. 20.1 ft.
-140 -				┼		1111	*DESCRIPTION SILTY CLAY; motiled dark gray and brown, moist, stiff to
F 1	#2D	60 60		1.5- 2.5			very stiff, medium plasticity, some cream colored patches also.
t d	#29	60,60		2.5			uter.
145 -				} -	CI.		SILTY OF AY: mottled dark gray and dark brown with some
t 1	A 70	10/00		1.5	1		dark grown gray, slightly moist, stiff, medium plastic.
t d	# 30	48/60		2.0			
- 150 -							CLAYEY SILT; dark and darker gray grading to mottled dark
t 1	#31	607'60		2.6-			gray and dark brown, dry to slightly moist, very stiff, low plasticity, shear zones.
t d	,	307111		2.8			prosticity, snedi zones.
155	L				ML		
t 1	#32	47/60		4.5	1		
t d	₩JZ	47/60	1				
160							SANDS; black to tan, coarse to fine grained (predominantly fine), subrounded to rounded, trace of gravels and fines.
! 1		0.700			sw		, , , , , , , , , , , , , , , , , , , ,
F -	433	0,780	1				
165					-	1111	SILTY CLAY: mottled light and dark gray, slightly moist, stiff
t 1	p = 1	24 /00	1	2.6~ 2.4			to very stiff, medium to high plasticity, trace of coarse.
t 1	#34	24/60	1	2.8	CL.		rounded cauds and gravels .
170					L		CLATEY SILT; dark (steel) gray, slightly moist, very stiff,
t 1		1		2.25 -			low to medium plasticity, shear zones (slickensides).
E d	#35	58 50	1	2.5	ML		!
175						###	GRAVELLY SILTY SAND; black to light brown, coarse to line
t 1		0 /27					grained, angular to subrounded, gravel is rounded.
E 1	# 36	n/ 60					
F180 7					SM		GRAVELLY SILTY SAND; light gray to brown, coarse to fine
t 1			1				grained (predominantly medium grained), angular to sub-
E	#37	0, 60					angular, gravel is angular and poorly sorted (small sizes).
185					ļ		First 8" SILTY CLAY; gray, moist, soft to stiff, high plasticity.
t 1				1,0-			36" sandy clay, tan, very moist, stiff, high plasticity
}	#.55	44 80		1.5			sand is line to very fine, with trace of rounded, medium arained.
190							GRANFILL CULLY CLAY; whitish gray to gray, medium
t 1			1	2.25			grained, dry, very stiff, medium plasticity, gravel is spain
F 7	#36	10 '50	1	2.25 - 2.5	CH~		but apparent; 5~15mm in size.
105					J.,		SUITY CLAY, grading to pandy sitt argue to dark argue state
t d				1.5-			SILTY CLAY; grading to sandy silt, gray to dark gray, moist, to very moist, stiff, clay has high plasticity, silt has low
F7	# 40	₆ ጋ ይባ		1.8			 plasticity, sand is fine to very fine grained with trace of medium grained.
200							
F 4) ₂ -,			CLAYEY SILT; dark gray, with whitish gray streaks, dry, verv stiff, low plasticity.
FF	#41	30/60	1	2.7. 3.6			
205			1		ML-		CUT/CUTX CLAY A LA LA CONTRACTOR
1200				1.5	CL		SILT/SILTY CLAY; dark brown with light gray and whitish gray streaks and patches, dry to slightly moist, hard, medium
F 1	#12	54, 60		1.5			plasticity, some rounded coarse sand in Isolated zones.
t210 1				<u> </u>			

DRILLING CO.: Water Development Co.

DRILLING METHOD: Mad Rotary

SAMPLER: 5' Core Barrel Wireling Compler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

-			,					
ļ	-	<u>~</u>]		Ι.		BORING NO. GB#12
	JEPTH 14 FEET	SAMPLE TYPE & HUMBER	RECOVERY	WELL SUMMA	WEASURED CONS.STENCY	USCS SYMBOL	BROFILE	COORDINATES N. 335,819.1 FIFED RE J. Hadsall DATE REGAN 8/1/88 CHECKED BY J. Hadsall DATE FINISHED 8/3/88 TOTAL DEPTH 253 feet GROUND SURFACE EL. 20.1 ft. DESCRIPTION
ŀ	210-		 			+	han	CLAYEY SILT; dark gray and brown grading to brown only,
	-	#43	60/60		3.6- 4.3			slightly moist, very stiff to hard, low to medium plasticity, trace of fine sands.
F	215-	#44	0/60					SILTY SANDS: black to gray to white, coarse to fine grained, angular to subrounded, dirty, trace of fine gravel.
F	220					SM		SILTY SANDS, grow to ten pages to fine posited and
 - -	-	#45	0/60					SILTY SANDS; gray to tan, coarse to fine grained, sub- rounded to rounded, dirty.
ţ	225 -							SANDS; black to tan, coarse to very fine grained, sub-
Ė	7 7.7	#46	0/60			sw		rounded to rounded, trace of silts.
F	7							SANDS; black and brown to tan, medium to fine grained, subangular to subrounded, trace of fines and rounded
þ	4	#47	0/60			SP		coarse grained sand.
t	 :-					_ 3	1000	
ŀ	-							
		#48	•	Core barrel unable to be retrieved on this run. From 235 to 255 feet logged as one sample.	0.25- 1.25			Alternating layers of gravelly clays and clays, gray to dark gray, moist, soft to medium stiff, high to very high plasticity, gravel is coarse grained, rounded, black and gray trace of fine sand.
F.		1	ł					TOTAL DEPTH 253 FEET
F	255-						1	4-1/2" diameter boring
F	‡	1)				
L,	67							
F	4		ļ					
-	-							
F	e.]	ļ	İ					
Ė	7	ŀ	ľ	Ì				
ţ.	1							
E ²	~	1	}					
F	7							
F	7			1			İ	
<u> </u>	75							
Ł	4			ļ				
ŀ.	<u>-</u>	_						
-/	ou —							·

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB12.DWG

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...Creating a Safer Tomorrow

				· · · · ·	-		BORING NO. W9-3(C)
FEET	BER			_es	占		` *
N F	SAMPLE TPE & NUMBER	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	JI.E	FIELD GEOLOGIST E Wessner
	SAMPLE E & NUN	ECO .	WELL SOMMAN	NPLE PER	S	PROFILE	EDITED BY D. Cox DATE BEGAN 8/15/88 CHECKED BY J. Hadsall DATE FINISHED 8/18/88
ЭЕРТН	, TPE	œ.		B ₹))S(TOTAL DEPTH 174.7 feet GROUND SURFACE EL. 20.1 ft.
							DESCRIPTION
F '-	MD#1	6/18	12 Christy box	5,7,9	FILL	777	FILL: sandy clay; black-dark brown. SILTY CLAY; dark brown, slightly moist, soft, very plastic,
			8"x5' standpipe				gravel inclusions.
5 - 5	MD#2	6/18		3,6,7			CANDY SHEEK SLAVE alice arous alighbly he madesately maint
	MD#3	10/18		3,5,4			SANDY SILTY CLAY; olive gray, slightly to moderately moist, soft, slightly to moderately plastic.
$\mathbf{F} = \mathbf{F}$							
10					CL- CH		SILTY CLAY; gray, moderately moist, moderately plastic.
1 1			[·,],·				Service of the servic
Ŀз							
-15 -							
1 1							
- 20 -					GW	90	SANDY GRAVEL; fine grained, saturated, very poorly sorted, angular gravels.
FF							SILTY SAND, CLAY; olive gray, moist, moderately plastic.
1 1							
25							
ĿЫ	J						Small sand stringers throughout.
F , , -							SILTY CLAY; orange brown, moist, soft, moderately plastic.
30			4" sch. 40 steel				Continued stringers of coarse angular, poorly sorted sand.
t 1							
-35-		1					
F 3 3			Bentonite/ cement grout				
F 4			1 1 1		CL-		
1.40			Centralizer		SW		CUTA CLAVE I I COMPANIA CONTRACTOR CONTRACTO
t d			19 N				SILTY CLAY; brownish gray, moist, soft to very soft, plastic.
FF			[1] [3]	ļ			Stringers of sands
45	ĺ	ĺ		ĺ			SILTY CLAY; light brown, moderately moist, stiff, slightly
t 1							plastic.
Ьd	ľ	1		1			
50		ŀ					SAND; fine to coarse, black to clear, unsorted, angular
F 7	ł	ł					stringers.
‡ ‡	l	İ					SILTY CLAY; brown-gray, moist, soft, moderately plastic.
-55-]	}					
F 7		1		ļ			SAND; coarse, black and tan, subangular, poorly sorted.
F 1					sw		
-60	Ì	ľ		ł	244		i
F -				}		1111	CLAY/SILTY CLAY; brown-tan, moist, soft, plastic.
F 7	}		14 14		CL		
-65-	ľ	j		ţ		7777	CLAY/SAND; interbedded, black and tan, sand is fine to
b -	}	- 1		}	SP-		coarse, angular. No noticable, water during drilling.
F7					OL.		-
- /() - -						Linner	

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 3



...Creating a Safer Tomorrow

							BORING NO. W9-3(C)
FEET	BER			pr _s	占		· ´
	MPLE & NUMBER	RECOVERY (IN.)		BLOWS ON SAMPLER PER (PER 6")	SYMBOL	¥	FIELD GEOLOGIST E. Wessner COORDINATES E 1.548,305.4
ž I	SAMPLE E & NUI	ģ₹	WELL SUMMARY	P.E.	Ś	PROFILE	EDITED BY D. Cox DATE BEGAN 8/15/88
лЕР тн	SA	Α,		SAM	nscs	۵	CHECKED BY J. Hodgoll DATE FINISHED 8/18/88
٦	۲)		TOTAL DEPTH 174.7 feet GROUND SURFACE EL. 20.1 ft.
- 70 -							DESCRIPTION CLAY/SILTY CLAY; gray-brown, moist, stiff, very plastic.
F					CH-		, , , , , , , , , , , , , , , , , , , ,
E 3			- -		CH-		
- 75					SP		Sand stringer
t i					유		CLAY/SILTY CLAY; gray brown, moist, soft, very plastic.
}					CL		SAND; very fine to medium grained, subround, unconsolidated
80							inclusions of fine gravel.
					SP		
F 7							
85						111	SANDY SILTY CLAY; light brown, moist, very soft, moderately
F "]					CL- SP		plastic, interbedded with fine sands.
<u>t</u> 1				1	SP		
1.1							SANDS; very fine to medium grained, black and clear, sub-
90 -					į		round, poorly sorted.
+ +							Making water, flowing.
F]	j						
- 95 ~							Sand is clayey silty, "flowing sands" (unconsolidated,
F]					SW		saturated, very fine) Very loose flowing sands.
t 1				ì	l		very loose nowing sands.
100							
1	İ						
t 1	1		[] [] [] [] [] [] [] [] [] []	ſ		111	SILTY CLAY/CLAY; gray, moist, stiff, moderatly to slightly
-105 -			Centralizer				plastic. A few sand stringers.
L 1	ł		 	ł			r tem sund stringers.
! -	1	j					
110	ŀ	Í					
E d	f			1	•		1
F 4			[1]				
115	- 1	l		- 1.	CL-		}
H +	1				sw		SILTY CLAY; orangish brown, moist, soft, very plastic.
F 1	j	J	} 1 1 1				
120			- - - -		•		CLAY/SILTY CLAY; gray brown, moderately moist, stiff, moderately to slightly plastic.
F -	J	ļ			•		CLAY/SILTY CLAY; gray and brown, moist, soft to stiff, moderately plastic, with 1-2' sand; very fine grained, poorly
t 1	1	1					sorted, subrounded, "flowing sand" with roots and fibers
L				j			(organics). Making water.
125	J						
t d	1		1:4 1:4	ŀ	··		CLAY/SILTY CLAY; gray, moist, stiff, very plastic.
F				1			Grading into very firm-
130	- 1	.		- 1			CLAY/SILTY CLAY; olive gray, moderately moist, very stiff,
}		1					moderate plasticity.
r 1		- 1	[4]		CL		
135-	1	[İ
F 7							
t i	1	- 1	Bentonite pellets	- 1			}
L140 1							

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-W9-3C.DWG

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...Creating a Safer Tomorrow

				_	_	_	BORING NO. $W9-3(C)$
FEET	SAMPLE TYPE & NUMBER	. بر		S PER	SYMBOL	ш	COORDINATES N. 335.811.3
Z.	SAMPLE E & NU	RECOVERY (IN.)	WELL SUMMARY	BLOWS O SAMPLER (PROFILE	FIELD GEOLOGIST <u>E. Wessner</u> EDITED BY <u>D. Cox</u> CHECKED BY <u>J. Hadsall</u> DATE FINISHED <u>8/18/88</u>
JEP TH	S	2		B SAN	OSCS		TOTAL DEPTH 174.7 feet GROUND SURFACE EL 20.1 ft.
-140 -							DESCRIPTION CLAY/SILTY CLAY; gray, moist, stiff, plastic to very plastic.
			Bentonite pellets				
145			137.9 to 154.8				
					CL-		
150					0		
155							
<u> </u>			Centralizer ————————————————————————————————————	.	SW	7777,	SILTY SAND; medium coarse, subangular, moderately sorted.
150			4" .010 S.S. screen		G₩		GRAVELLY SAND; medium coarse with gravels fine grained, black—opaque, angular, poorly sorted, clean.
			to 167.2 feet———————————————————————————————————		CL- SW		SILTY CLAY; gray, moist to moderately moist, soft—stiff, moderately plastic, fine gravel inclusions.
165			Centralizer				Stringers of coarse sand, black angular, moderately sorted.
‡ =	İ		#IC sand		CL-		CLAY/SILTY CLAY; moist to moderately moist, stiff, very
170					СН		plastic.
 	ł	ľ	Bentonite backfill				
175	 		21.12.1				TOTAL DEPTH 174.6 FEET
			9.6"	-			
180							
F ‡							:
185		{					
‡ ‡		ľ					
190							
F = 1	ĺ			}			
195							
200							
‡ ‡							
205							
‡ ‡							
C ₂₁₀ 1		L	1				

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FRE: MF-W9-3C.DWG

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...Creating a Safer Tomorrow

								BORING NO. W9-4(B2)
FEET	ER					<u>ب</u>		` '
	SAMPLE TYPE & NUMBER	RECOVERY		V	BLOWS ON SAMPLER (PER 6")	SYMBOL	삘	FIELD GEOLOGIST E. Wessner COORDINATES E. 1,548,121.6
H H	AMP A	Š ž	WELL SUMMAR	۲.	9 ¥ £	S	PROFILE	EDITED BY D. Cox DATE BEGAN 7/21/88
g 3) E:	PE S	RE (1 8 0	nscs	۵	CHECKED BY J. Hodgall DATE FINISHED 7/21/88 TOTAL DEPTH 94.3 feet GROUND SURFACE EL. 14 ft.
1	۲							DESCRIPTION
- 0 -			12" Christy box-	ı 🗀				SILTY CLAY; dark gray, slightly moist, stiff, moderately
	MD # 1	10/18	8"x5" standplpe	机门	3,4,10			plastic.
ļ -	MD#2	10/18		1] [],	5,7,11	Ct.		SILTY CLAY; olive green, slightly moist, soft, moderately
5 -	WD#3	18/18		' :	3,5,7			plastic.
1 5	MD#4	18/18	ļ ļ		5,5,5			SILTY SANDY CLAY; olive to gray, moist, soft, low plasticity,
F								oxidized stains with few coarse sands.
-10 -			Bentonite/	<u>. </u>				A 4 4 1 A A A A II
t i			cement grout	' '		CL		Adding water to drill
F -				. :		ML		
-15 -				: :				SILTY CLAY; gray, moist, soft, moderately plastic.
<u>t</u> :			ŀ					
 			ľ					
20						GW	33	GRAVEL; fine gravel, black, subangular, poorly sorted.
t i				4 1		- GW	38	
- -			Ī					SILTY CLAY; brown, moderately moist, soft, slightly plastic.
- 25 -	'			.] [
<u> </u>								
F., +	ļ		4° sch. 40 steel casing			CL		
130								
t			ļ	1				
h d			ľ					SANDY GRAVEL; tan to light brown, subround, poorly sorted,
35							30	fine gravel grading to coarse sandy gravel.
1 1	1		ł			GW	Ψğ	
L								
-40 -]	j	j					SILTY SANDY CLAY; light brown, moist, soft, moderately plastic.
1 1			Ļ	' '		CL		pros. 10.
45-			Į:	4 4				
F^{-1}	1		l:	1 1:1		GW	88	SAND/GRAVEL; black and gray, subangular, poorly sorted coarse sand and fine gravel.
‡ ‡			ļ	1 1				SILTY CLAY; light brown, moist, soft, moderately plastic.
- -50-			}	1 1	Į	CL		
F.,,								CLAYEY SAND; tan, wet, loose, very fine grained, interbedded 1-2' with silty clays.
F 1		ļ		$\left \cdot \right \left \cdot \right $		_		·
55	1	ĺ	[: :		SC- CL		
F "	1	ļ	ŀ		l			į
F 7	1		F.		· }			
60			į,	1 [3		_		SILTY CLAY; light brown, moist, stiff, moderately plastic, interbedded with sandy silty clay.
F ~		l	ł		j	CL- ML		
F 1			r.			-		
65	- 1		l _:					į
F~	- 1	ľ		: :	- 1			ł
‡ ‡	ł	1		[] []				
F +								_
- / 0 -								

SAMPLING METHODS: MD=California Modified S=Split Barrel

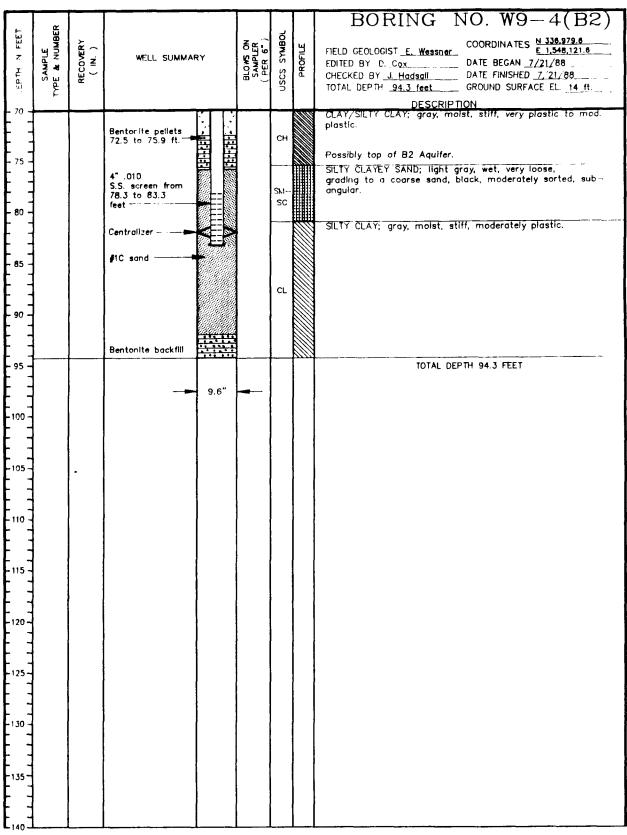
PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MFW9-482.DWG

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...Creating a Safer Tomorrow



SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MFW9-482.DWG

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...Creating a Safer Tomorrow

WELL SUMMARY WE	NO. W9 -5B3
WELL SUMMARY WE	
MELL SUMMARY WE	COORDINATES N. 336,993.2 E 1,548,115.8
THE STATE OF THE CHECKED BY J. Hadsall	DATE BEGAN 7/26/88
	DATE FINISHED 7/26/88
TOTAL DEPTH 124.1 feet	GROUND SURFACE EL. 13.8 ft.
DESCRI	PTION gray, slightly moist, soft, very
12" Christy box CLAY-SILTY CLAY; dark g plastic.	ray, angrey moiat, sort, very
MD#2 10/18 7,14,13 C SILTY CLAY; light gray, sli	ightly moist, stiff, mod. plastic.
grout CLAILT SILI; onlye gray, r	molst, very soft, mod. plastic.
MD#4 12/10 1 1 1 1 1 1 1 1 1	moderately moist, very soft,
casing plastic, mottled light gray	
[]	
Made connection at 20° a	and had water blow out after
connection.	
	k, fine grained, angular, moderately
GM-111 sorted.	
SILTY CLAY; brown-gray,	moist, soft, plastic.
²⁵	
CLAYEY SILT; brown, mols	at. soft. plastic.
[30] MH MH	
FINE GRAVEL; brown, subc	angular, moderately to poorly
[35]	
CH SILTY CLAY; brown, moist	, soft, plastic. lack, angular, poorly sorted.
[407]	
GRAVELLY SILTY CLAY; bro	own, moist, soft, plastic, inclusions
GW FINE GRAVEL; wet, angula	r, poorly sorted.
	, soft, plastic, mottled with slightly
CH platey structure.	
TO THE GRAVEL: poorly sorte	
50 CLAYEY SILT; Interbedded,	, brown, moist, soft, moderately
plastic, interbedded with s	small fine gravel.
	İ
-55 - ML ML	
	i
60 SI TV CLAY: brown soft	moist, very plastic, interpedded
with a gray silty clay.	most, very prustic, interpedded
65 - CL- CL-	
	1

DRILLING CO.: Water Development Co.

DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MFW9-583.DWG

PAGE 1 OF 2



... Creating a Safer Tomorrow

MELL SUMMARY WELL SUMMARY SUMMARY SUMMARY SUMMARY SUMMARY WELL SUMMARY WELL SUMMARY WELL SUMMARY WELL SUMMARY WELL SUMMARY WELL SUMMARY WELL SUMMARY WELL SUMMARY SUMMARY SUMMARY SUMMARY WELL SUMM								BORING NO. W9-5B3
DESCRIPTION DESCRIPTION SILTY CLAY, gray, stiff, moderately maist, moderately plostic, interhedded with a brown silty clay. CLAYEY SAID; coarse grain-line gravel, subangular, mod. sorted, grading to medium to fine sand. Mater bearing CLAYEY SILT; brown-light gray, maist, soft, moderately plostic. SILTY CLAY; brown-light gray, maist, soft, moderately moist, plostic. 1' interhedding of sand. SILTY CLAY; brown-light gray, moist to moderately moist, plostic. 1' interhedding of sand. SILTY CLAY; gray-brown, soft, moist, very plastic. CLAYEY SAND; fine grained, brown with black specs, well worked, longe, wet. Making water SILTY CLAY; draik brown, moist, soft, very plastic. CLAYEY SAND; fine grained, brown-gray, wei, will serted, longe. SILTY CLAY; draik brown, moist, soft, very plastic. CLAYEY SAND; fine grained, brown-gray, wei, will serted, longe. SILTY CLAY; draik brown, moist, soft, very plastic. CLAYEY SAND; fine grained, brown-gray, wei, will serted, longe. SILTY CLAY; draik brown gray, moist, soft, very plastic. CLAYEY SAND; fine grained, brown-gray, wei, moderately sorted, longe, some concess condo. Moking water SILTY CLAY: draik brown gray, moist, soft. CLAYEY SAND; fine grained, brown-gray, wei, moderately sorted, longe, some concess condo. Moking water SILTY CLAY: draik brown gray, moist, soft. CH. Bentonite beachility.	1	ER			gc	占		
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Dentonite/ cement grout CLAYEY SAND: coarse grain-line gravel, subangular, mod. sorted, grading to medium to fine sand. Water hearing ML CLAYEY SILT: brown-light gray, moist, soft, moderately plastic. SILTY CLAY: brown, moist, soft, wery plastic. SILTY CLAY: brown, moist, soft, wery plastic. SILTY CLAY: gray-brown, soft, moist, very plastic. Centralizer 100 110 110 110 111 110 111 1								DESCRIPTION
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CLAYE SAID: coarse grain-fine gravel, subangular, med. society, grading to medium to fine sand. CLAYE SLI; brown-light gray, moist, soft, moderately plostic. SLIY CLAY: brown, moist, soft, very plastic. SLIY CLAY: gray-brown, soft, moiet, very plastic. Centralizer 0 133 feet CLAYE SAID: fine grained, brown with black specs, well sorted, loose, wet. Making water SLIY CLAY: dark brown, meiet, soft, very plastic. CLAY: SAID: fine grained, brown with black specs, well sorted, loose, wet. SLIY CLAY: dark brown, meiet, soft, very plastic. CLAY: SAID: fine grained, brown gray, wet, well sorted, loose, some coarse sands. Making water SLIY CLAY: dark brown, meiet, soft, very plastic. CLAY: SAID: fine grained, brown gray, wet, well sorted, loose, some coarse sands. Making water SLIY CLAY: dark brown gray, meist, soft, very plastic. CLAY: SAID: fine grained, brown gray, wet, meiet sorted, loose, some coarse sands. Making water SLIY CLAY: dark brown gray, maist, soft. TOTAL DEPRI 124.1 FEET	F 7					CI.		
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Sc. Water bearing CLAYEY SILT: brown-light gray, moist, soft, way plastic. SILTY CLAY: brown, moist, soft, way plastic. SILTY CLAY: brown, moist, soft, way plastic. SILTY CLAY: gray-brown, soft, moist, very plastic. Chartest SAND: fine grained, brown with black specs, well sorted, loose, wet. Making water Silty Clay: dark brown, moist, soft, very plastic. CLAYEY SAND: fine grained, brown with black specs, well sorted, loose, wet. Making water Silty Clay: dark brown, moist, soft, very plastic. Clayer SAND: fine grained, brown with black specs, well sorted, loose, wet. Making water Silty Clay: dark brown gray, moist, soft, very plastic. Clayer SAND: fine grained, brown-gray, wet, wiell sorted, loose, wet. Making water Silty Clay: dark brown gray, moist, soft, very plastic. Clayer SAND: fine grained, brown-gray, wet, mill sorted, loose, sorted, loose, some coarse sonds. Making water Silty Clay: dark brown gray, moist, soft, very plastic. Clayer SAND: fine grained, brown-gray, wet, mill sorted, loose, some coarse sonds. Making water Silty Clay: dark brown gray, moist, soft. CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-CH-C	<u>t</u> :							CLAVY SAMP fine arguel subangular mod
Bentonite pellets 92.7 to 35.6 ft. 95. Centralizer © 103 feet. CEATEY SNLT; brown-light gray, moist, soft, wery plastic. SILTY CLAY; brown, moist, soft, very plastic. SILTY CLAY; brown, moist, soft, very plastic. CH SILTY CLAY; gray-brown, soft, moist, very plastic. CH SILTY CLAY; gray-brown, soft, moist, very plastic. CLAYEY SND; fine grained, brown with black specs, well sorted, loose, wet. Making water SILTY CLAY; gray-brown, soft, moist, very plastic. CLAYEY SND; fine grained, brown with black specs, well sorted, loose, wet. Making water SILTY CLAY; dark brown, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, will sorted, loose. SM SILTY CLAY; dark brown-gray, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, moderately socked, loose, softed, loose, some coarse sands. Making water SILTY CLAY; dark brown, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, moderately socked, loose, some coarse sands. Making water SILTY CLAY; dark brown, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, moderately socked, loose, some coarse sands. Making water SILTY CLAY; dark brown, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, moderately socked, loose, some coarse sands. Making water SILTY CLAY; dark brown, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, will sorted, loose, some coarse sands. Making water SILTY CLAY; dark brown, moist, soft, very plastic. CLAYEY SND; fine grained, brown-gray, wet, moderately socked. TOTAL DEPBH 124.1 FEET	t d							sorted, grading to medium to fine sand.
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Bentonite pellets 92.7 to 93.5 ft. Centralizer © 103 feet. CLATEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water CH SILTY CLAY; drark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water SC Silty CLAY; drark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water SILTY CLAY; drark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY; drark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY; drark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY; drark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY; drark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY; drark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY; drark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, wet, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic.	F 7							
SILTY CLAY; brown, moist, soft, very plastic. SILTY CLAY; brown, moist, soft, very plastic. SILTY CLAY; brown, moist, soft, very plastic. SILTY CLAY; gray-brown, soft, moiet, very plastic. Centralizer © 103 feet. CLAYEY SAND; fine grained, brown with black specs, well served, loose, wet. Making water SILTY CLAY; gray-brown, soft, moiet, very plastic. CLAYEY SAND; fine grained, brown with black specs, well served, loose, wet. Making water SILTY CLAY; dark brown, moiet, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CLAYEY SAND; fine grained, brown-gray, wet, will sorted, loose. SILTY CLAY; dark brown gray, moist, soft, very plastic. CLAYEY SAND; fine grained, brown-gray, wet, will sorted, loose. SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. CH SILTY CLAY; dark brown gray, moist, soft, very plastic. TOTAL DEPTH 124.1 FEET	F 3					M		
SILTY CLAY: brown-light gray, moist to moderately moist, plastic, 1' interbedding of sand. Centralizer © 1/33 feet Controller of 1/33 feet Controller of 1/34 feet SILTY CLAY: gray-brown, soft, moist, very plastic. CLAYEY SAND: fine grained, brown with black specs, well sorted, loose, wet. Making water SILTY CLAY: gray-brown, soft, moist, very plastic. CLAYEY SAND: fine grained, brown with black specs, well sorted, loose, soft, brown gray, wet, well sorted, loose. SILTY CLAY: dark brown, moist, soft, very plastic. CH SILTY CLAY: dark brown gray, moist, soft, very plastic. CANTEY SAND: fine grained, brown-gray, wet, well sorted, loose. SILTY CLAY: dark brown gray, moist, soft, very plastic. CH SILTY CLAY: dark brown gray, moist, soft, very plastic. CH SILTY CLAY: dark brown gray, moist, soft. CH-CL SILTY CLAY: dark brown gray, moist, soft. CH-CL SILTY CLAY: dark brown gray, moist, soft. CH-CL TOTAL DEPTH 124.1 FEET	85 -					1711		
Bentrnite pellets 92.7 to 95.6 ft. Centralizer © 113 feet. 110 S.S. screen from 97.7 to 112.7 feet Centralizer © 111 G.A.; dark brown, moiet, soft, very plastic. CLATEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water SILTY CLAY; gray—brown, soft, moist, very plastic. CLATEY SAND; fine grained, brown with black specs, well sorted, loose SiLTY CLAY; dark brown, moiet, soft, very plastic. Controlizer © 111 feet SILTY CLAY; dark brown, moiet, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose SiLTY CLAY; dark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose SiLTY CLAY; dark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Moking water SILTY CLAY; dark brown gray, moist, soft. CHATEY SAND; fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Moking water SILTY CLAY; dark brown gray, moist, soft. CHATEY SAND; fine grained, brown-gray, wet, well sorted, loose SiLTY CLAY; dark brown gray, moist, soft. CHATEY SAND; fine grained, brown gray, moist, soft. CHATEY SAND; fine grained, brown-gray, wet, well sorted, loose SiLTY CLAY; dark brown gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft. CHATEY SAND; fine grained, brown-gray, moist, soft.	<u>t</u> :							SIETT GUAT, Drown, moist, sort, very pidatic.
Bentrnite pellets 92.7 to 95.6 ft. Centralizer © 1/13 feet. 1/10 S.S. screen from 97.7 to 112.7 feet 1/10	L 00 =							
Bentrnite palets 92.7 to 95.6 ft.	F 30]							SILTY CLAY; brown—light gray, moist to moderately moist, plastic, 1' interbedding of sand.
SILTY CLAY; gray-brown, soft, moiet, very plastic. CLAYEY SAND: fine grained, brown with black specs, well sorted, loose, wet. Making water SC. SC. SC. SC. SC. SC. SC. SC. SC. SC	‡ 4			Bentonite pellets		СН		
CLAYEY SAND: fine grained, brown with black specs, well sorted, loose, wet. Making water SC S.S. screen from 97.7 to 117.7 feet CH SILTY CLAY: dark brown, moist, soft, very plastic. CLAYEY SAND: fine grained, brown-gray, wet, well sorted, loose SiLTY CLAY: dark brown-gray, moist, soft, very plastic. CLAYEY SAND: fine grained, brown-gray, wet, well sorted, loose SiLTY CLAY: dark brown-gray, moist, soft, very plastic. CLAYEY SAND: fine grained, brown-gray, wet, well sorted, loose, SiLTY CLAY: dark brown-gray, moist, soft, very plastic. CLAYEY SAND: fine grained, brown-gray, wet, well sorted, loose, SiLTY CLAY: dark brown-gray, moist, soft, very plastic. CLAYEY SAND: fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Making water SILTY CLAY: dark brown gray, moist, soft. CH-CL TOTAL DEPTH 124.1 FEET	95 =							SILTY CLAY; gray—brown, soft, moist, very plastic.
CLATEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water SC Sittin ClAT; dark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water Sittin ClAT; dark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown with black specs, well sorted, loose. SC Sittin ClAT; dark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, wet, will sorted, loose. Sittin ClAT; dark brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown gray, moist, soft. CLATEY SAND; fine grained, brown gray, wet, will sorted, loose. Sittin ClAT; dark brown gray, moist, soft. CH-CL TOTAL DEPTH 124.1 FEET	E							
Sc. Screen from 97.7 to 117.7 feet	F -							
sorted, loose, wet. Making water SC S.S. screen from 97.7 to 117.7 feet SILTY CLAT: dark brown, moist, soft, very plastic. CLATE SAND: fine grained, brown-gray, wet, well sorted, loose, soft, loose, some coarse sands. Making water SC SILTY CLAT: dark brown-gray, moist, soft, very plastic. CLATE SAND: fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Making water SILTY CLAT: dark brown gray, moist, soft. CH-CL Bentanite backfill- 130	L ₁₀₀ -							CLAYEY SAND; fine grained, brown with black specs, well
4. 010 S.S. screen from 97.7 to 117.7 feet -110 -110 -115 -115 -120 -130 -130 -130 -130 -130 -130 -130 -13	F 7							sorted, loose, wet.
SiLIY CLAT: dark brown, moist, soft, very plastic. CH SiLIY CLAT: dark brown, moist, soft, very plastic. CLATET SAND: fine grained, brown-gray, wet, well sorted, loose. GLATET SAND: fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Making water SiLIY CLAT: dark brown gray, moist, soft. CH-CL Bentanite backfill 125 9.6" 70TAL DEPTH 124.1 FEET	‡ ‡							Making water
97.7 to 112.7 feet CH SILTY CLAT; dark brown, moiet, soft, very plastic. CH SC-SM CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. CHATEY SAND; fine grained, brown-gray, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Making water SILTY CLAT; dark brown gray, moist, soft. CH-CL TOTAL DEPTH 124.1 FEET	-105 -					sc		
SILTY CLAT; dark brown, moist, soft, very plastic. CLATEY SAND; fine grained, brown-gray, wet, well sorted, loose. Centralizer Clate SAND; fine grained, brown-gray, wet, moderately sorted, loose, some coarse sands. Making water SILTY CLAT; dark brown-gray, moist, soft. CH-CL Bentanite backfill- 125- 9.6" TOTAL DEPTH 124.1 FEET	Ed			97.7 to 117.7				·
CH Sith CAX; dark brown, makt, soll, very plastic. Centralizer Controlizer Co	F3			Teet ===				
SM Since	- 110 4					СН		SILTY CLĀt: dārk brown, moist, soft, vēry plastic.
Centralizer Contro	F 4					SC-		
SC-SM Sorted, looce, some coarse sands. Making water SILTY CLAY: dark brown gray, moist, soft. CH-CL 130- 130	-115			AIC SOLD		व्य/व		SILTY CLAT; dark brown gray, moist, soft, very plastic.
Bentanite backfill - 9.6" Making water SILT CILAT; dark brown gray, moist, soft. CH-CL TOTAL DEPTH 124.1 FEET	<u> </u>					SC-		sorted, loose, some coarse sands.
Bentanite backfill	<u> </u>					JM		
TOTAL DEPTH 124.1 FEET 9.6" TOTAL DEPTH 124.1 FEET	120			94 1 1 4 B		C1.		SILTY CLAY; dark brown gray, moist, soft.
125 - 9.6" - 130 -	F 7			Bentanite backfille		CH- CL		
9.6"	1 1							
	125							TOTAL DEPTH 124.1 FEET
	<u>t</u> d			 9.6"				
	L ,,,,							
135 -	F 30 7		•					
135	1 1							
	L , 35							
	L 3							
	<u> </u>							
				<u> </u>			Ш	

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MFW9-5B3.DWG

PAGE 2 OF 2



...Creating a Safer Tomorrow

		,					
FEET	ER				۲		BORING NO. $W9-6(A)$
	MAPLE & NUMBER	RECOVERY (:N.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6)	SYMBOL	믵	FIELD GEOLOGIST _W. Hopkins COORDINATES N 336,389.7 E 1,548,272.7
DEPTH IN	SAMPLE E & NU	E CO	33mm	BLOW SAME PER	USCS S	PROFILE	EDITED BY D. Cox DATE BEGAN 7/18/88 DATE FINISHED 7/18/88
DEF	SA				S)		TOTAL DEPTH 35 feet GROUND SURFACE EL. 18.5 ft.
-0-		i	12" Christy box		<u> </u>	ide:	DESCRIPTION SILTY CLAY; dark gray to black, dry, soft, slightly plastic.
F 7	MD#1	6/18	8"x5" standpipe—	5,4,15	OL.		Organicrich
F	MD#2	9/18	top of casing	7,14,24			SILTY CLAY; black, moist—dry(damp), stiff, moderately plastic.
5 ~	MD#3	10/18	4" sch. 40 steel casing -	7,10,14			CLAYEY SILT; light brown, dry-moist(damp), stiff, slightly
F 7	s	42/42	Bentonite/				SILTY CLAY; light ollve brown, moist, medium stiff, mod. plastic.
F10-			cement grout—		ML-		At 12.5 to 13.5 ft. clayey silt to slit.
F	S	60/60	Bentonite pellets		CI		CLAYEY SILT; medium gray, wet, medium stiff to soft,
F 7	3	60/60					slightly plastic.
-15			4" .010 S.S. screen from				Small amount of water at 13.0 ft. Silt has solvent odor, no reading on Hnu
1 1	MD∦4	13/18	15.2 to 25.2	2,2,3	/		
20					SM/SP		SILTY SAND; dark gray, wet(saturated), medium dense. CLAYEY SILT; dark gray, wet, very soft to
E 3	s	36/60	#1C sand				▼medium stiff, slightly plastic, minor sand. Water standing at 20—21 ft.
ĿЫ	5	36/60			ML		
25							
FF	s	36/60	**************************************				SILTY CLAY: light gray brown, wet, medium stiff,
F		00,00	19 9 19 9 19 9 19 9 1 1 1 9 1 9 1		CL		moderately plastic, minor pebbles.
-30			7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8				CLAYEY SANDY SILT/SILTY SAND; medium gray brown, wet.
F 7	S	30/60	Bentonite and dirt		ML-		medium stiff. No odor in this aguifer.
35		·	backfill		SP	ШЩ	
F 1			- 1 43"				TOTAL DEPTH 35 FEET
! :	1		- 12"	-			
40				}	l		
L 1							
45			}		- 1		
F F					ŀ		
E 3		,		1			
50							
F 7		l		į	ŀ		
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F 55 7		}	}		į		
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DRILLING CO.: Water Development Co. DRILLING METHOD: CME 75 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

ROJECT NO.: 409616

JENT: Moffett Naval Air Station Moffett Field, California

SAD FILE: MF-W9-6A.DW3

PAGE 1 OF 1



...Creating a Safer Tomorrow

			 		Г_	т—	DODING NO MO WAY
	8				ب		BORING NO. $W9-7(A)$
FEET	SAMPLE	RECOVERY (.N.)		8 €	TOBINAS	ш	FIELD GEOLOGIST W. Hopkins COORDINATES N. 336,168.7
7	J. J.	o z	WELL SUMMARY	BLOWS ON SAMPLER	};	PROFILE	FDITED BY D. Cox DATE BEGAN 7/21/88
HC GG	SA	, A		9 8 G	SCS	ă	CHECKED BY J. Hadsall DATE FINISHED 7/21/88
, ×	3				יה	j	TOTAL DEPTH 40 feet GROUND SURFACE EL. 19.66 ft.
- e -			12" Christy box			┝	DESCRIPTION FILL: sandy gravel; moderate brown, dry, medium dense.
F 4	MD#1	6/18	8 x5' standpipe———————————————————————————————————	1	FILI.	1	SILTY CLAY; black, moist, stiff, high plasticity.
L 1	MD#2	5/18	4" sch. 40 steel	1	OH		3
- 5 -	MD#3	9/18	casing-		MI.		CLAYEY SILT: light gray, moist, stiff, moderate plasticity, thin layer of pebbly sand (4 4.2 ft.)
FF			Bentonite/ cement grout		-		SILTY CLAY; medium gray with medium brown spots, moist
1 1	S	42/42	Bentonite pellets 💥 📜				to wet, stiff, moderately plastic.
F10 -			8.5 to 10 ft		CL		-
FF		60/60					
t 1	S	60/60	==				Cround water first appointment
-15 -			4" .010 S.S. screen from				▽ Ground water first encountered.
F7	s	40 /00	13.3 to 33.3 ft	i	ML		low plasticity.
1 1	,	40/60	#*C sond		, ,,,,,,		
-ro- 						шш	PEBBLY SAND; with clay and silt, dark greenish gray, wet,
F 7	_				sw		medium dense.
t 1	S	16,'60			3"		
-25-						1777	SANDY GRAVEL; with clay, grav, wet, low plasticity.
F 7		10 (00			GC		
1 1	s	10,760			GC	333	
-30-		15/18				777	SILTY SAND; medium brownish gray, wet, dense, poorly
F 7	s	0/18		ĺ	SP		graded.
t 1	S	0/18			Ji		
-35				}	L	111	SANDE CLAT; medium brown, wet, stiff, low plasticity.
FF	s	24 '80	Bentorite backfill	- 1	CL :		
1 1	5	24/60			رد		
40-							TOTAL DEPTH 40 FEET
FF				Í			TOTAL BELLIT WILE.
t 1	Í	Í	- 12"				
-45-	i						
FF	1			i			
t 1		ļ					
<u>F50</u>	j						
F 7	1	[[[1		
t 1	1			1			
F55-	ł	ł		ł	i		
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63]	}	ł			!
t d	- 1		1 1		Ì		.
F 7]		İ			[
t1	1				1		

DRILLING CO.: Water Development Co. DRILLING METHOD: CME. 75 Hollow Stein Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

	T	T	<u> </u>	1	_	\vdash	DODING NO WO 40/D4
<u> </u>	8			1	۱ ـ	ł	BORING NO. W9-13(B1)
FEET	SAMPLE	<u>k</u> ~	ļ	88€	SYMBOL	Щ	COORDINATES N. 336.152.5
Z.	d Z	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	l s	PROFILE	FIELD GEOLOGIST E. Wessner EDITED BY D. Cox DATE BEGAN 7/18/88
EPTH	SAI TYPE 1	Ä,			uscs	ď	CHECKED BY J. Hadsall DATE FINISHED 7/19/88
35	٤	ļ			5		TOTAL DEPTH 48 feet GROUND SURFACE EL. 19.6 ft.
- 0 -			12" Christy box		├	1111	DESCRIPTION SILTY CLAY; reddish brown, dry, non-plastic, gravel
† :	MD#1	10/18	8"x5" standpipe	9,5,6	1		inclusions.
t :	MD#2	8/18	top of casing	4.7,10	1		SILTY CLAY; black—dark gray, molst to moderately moist, moderately plastic.
- 5 -	=	===		`\ , }====			
-	MD#3	ND		3,7,9	CL		Color grading to a light gray.
t :							
-10-			4" sch. 40 steel	4	ł		
			casing	•			SILTY CLAY; It. gray, moist, soft, moderately plastic, platy
-			Bentonite/ cement grout	1	├		(slickensides) SILTY CLAY; light gray, moist to wet, soft to very soft,
15 -			Cement grout		СН		plastic.
	1		<u> </u>	1			<u>무</u> 7-18-88, 15:00.
-			[]]			CLAYEY GRAVELS; gray, angular, to subround, moderately sorted.
20-]	GC		
t i				1			
-							CLAYEY SAND; rounded, fine grained, moderately sorted.
25				•	sc		Service Sand, rounded, mile gramos, moderatory service.
L 3				:[SANDY CLAY; light gray, soft, wet, plastic, inclusions of
F -					СН		gravel.
30					5.		
				•	-		GRAVEL; poorly sorted, subround.
F 7					GW	G.	
35			Bentonite pellets	割	G#	88	
F 4		•	34 to 36 ft.	Ž.		1 E	SILTY CLAY; light~reddish brown, moist, soft, plastic.
F 7			4" .010 S.S. acreen from				Stop to take drive sample just up hole from expected
40		40 (40	38 to 43 ft.		СН		aquifer. GRAVELLY SILTY CLAY; gray, moist, plastic, very soft,
F ~4	MD#4	12/12	Centralizer	7,10			Inclusions of gravel. GRAVEL; poorly sorted, subrounded. B1 Aguifer
F 1			#10 2004		GW		, in the second of the second
45			#IC sand	1 1	СН		SILTY CLAY; light brown, moist, plastic, sticky, sand inclusions.
F ~ -	1	İ					SILTY CLAY; light brown, moderately moist, soft, moderately
F 1			Bentonite backfill	¥	CL		plastic.
E !					}		TOTAL DEPTH 48 FEET
50 -	-	,	9.6°		ļ]	
t 1		- [ļ	[
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Fe0 1]						
F -	[[
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F 1	ļ						
L 70 →	1		<u></u>				

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

		T	· · · · · · · · · · · · · · · · · · ·	_		_	DODING NO WO 1//D1
l la	85)		ļ.,	ر ا	ļ	BORING NO. W9-14(B1)
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN. ,		38€	SYMBOL	щ	COORDINATES N 335,498.3
<u>.</u>	4 ×	óΖ	WELL SUMMARY	BLOWS ON SAMPLER (PER 67)	ΣS	OFILE	FELD GEOLOGICA E. Weesner DATE BEGAN _8/5/88
EP TH	SA	REC \		0.18 2.48 3.18 3.18 3.18 3.18 3.18 3.18 3.18 3.1	SCS	ď.	CHECKED BY J. Hadsall DATE FINISHED 8/8/88
<u>ш</u>	}	1			J.		TOTAL DEPTH 54,7 fort GROUND SURFACE EL. 20.9 ft.
L 0 -							DESCRIPTION
-	MD#1	12/18	12 Christy box 5 8"x5" stondpipe - 1	5,5,7	ĺ		3' of asphalt pavement. TOPSOIL; light gray, silty clay, slightly moist, stiff, slightly
	= <u>:</u>	! ===	top of casing ——		CL		plastic.
5 -	MD#2	12/18		3,3,9	CL		SILTY CLAY; tan—light brown, slightly moist, stiff, slightly plastic, orange oxidized layers.
F ' -	MDN2	12/18	S 40	5,6,11			SANDY SILTY CLAY; with fine gravels, orange brown, slightly moist, soft, non-plastic.
L =			4 sch. 40 steel		_		GRAVELY SAND; black and clear, fine gravels, slightly
-		1 1	Bentonite/	[SP		moist, sub-angular.
F'''			cement grout	!			CANDY NAV
t i		l			CL		SANDY CLAY; gray, moist, very soft, moderately plastic. Graded to a silty clay, moist, very soft, very plastic.
FF					СН		
- 15 -]	ا في النا				SILTY CLAY; orangish brown, moist, very soft, very plastic.
1 -					G₽	ξť.	COARSE SAND/COARSE GRAVEL, slightly moist, angular, black-gray
1 1							, ,
- 20 -					CL		SANDY-SILTY CLAY; light gray, moist, soft, moderately plastic. Hit water •21'
F 7					SP-		COARSE SAND and FINE GRAVELS; black—tan, wet, angular.
t d					GP		
F 25 7						777	SILTY CLAY; light gray, moist, soft, moderately plastic.
t 1					CL		SANDY CLAY; light brown, moist—wet, very soft, moderately
F 4		} }	R 1	}			plastic. CLAY-SILTY CLAY; gray, moist, soft, plastic, sticky.
30					СН		
F 4							CLAYEY SAND; gray, medium—coarse grained, sub—angular.
F]				l	sc	*	Dallf his auddonly fall by 74° hus we made HAMA webs
35 -			Bentonite pellets	 			Drill bit suddenly fell to 34' but we made little water. SILTY CLAY; gray, moist, soft, plastic, inclusions of coarse
F 4			34.9 to 36.8 ft.—				sand.
t 1		1	4* .010 sch. 40	.	СН		
F.,-1			S.S. screen from 39 to 49 ft.	.			Making water
- 10 -		Í	Centralizer		sw		SAND: clear-tan, fine-coarse, poorly sorted, sub-rounded,
<u>t</u> 1				ł	CL		some gravels, no fines. SILTY CLAY; gray, moist, soft, moderately plastic.
F				- [Ģ.	SANDY GRAVEL; very poorly, sorted, sub angular, fine grained sand to coarse gravel. Grading into coarse gravel.
-45 -	i	1	Centralizer		GW	ž	same to cook so graves. Grading little course graves.
} →					-	9	Making water
F 1	ĺ		/IC sand	1		**	· ·
-50-		1	y Co Survi		CL		SILTY CLAY; orangish brown, moist, soft, medium plastic.
F 7	ļ	1		ſ			CLAYEY SILTY GRAVELLY SAND; black and brown, medium grained sand, fine gravels with fines interbedded.
t 1	ļ	- 1	Benton'te backfill	1	SW		gramed sund, mie graveis with intes interpedded.
-55-				+	\dashv		TOTAL DEPTH 54.7 FEET
F 1	İ	- 1	9.6"		- 1		TO THE DEL THE OTT / TEET
t d			3.0		J		
60	- 1			- 1	j	J	l l
<u>t</u> 1							
ŀ ∃							
L ₆₅ J				1	- 1	I	
F -						1	
[]				J	J	J	
L		-					
- 70							

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO .: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

	_						T	DODING NO WO 15/DOV
 	ρĸ				ļ	١.		BORING NO. W9-15(B2)
FEET	SAMPLE TYPE & NUMBER	\ `			Zα.	SYMBOL	ы	COORDINATES N. 335,826,0_ FIELD GEOLOGIST E. Wessner
7	골	RECOVERY	WELL SUMMA	RY	BLOWS ON SAMPLER (PER 6")	\ <u>₹</u>	ROFILE	
EP TH	SAMPLE E & NU	EC			PERSE		ıκ	FDITED B1 D. Cox DATE BEGAN 8/1/88 CHECKED BY J. Hadsall DATE FINISHED 8/4/88
ă,	YP.S.	œ.			²⁵ ~ ~	nscs	_	TOTAL DEPTH 108 feet GROUND SURFACE EL. 18.8 ft.
1 .,	í-				1	_		DESCRIPTION
-0-			12" Christy box-			_		SILTY CLAY; light brown—gray, slightly moist, soft, mod.
F 7	MD#1	6/10	8"x5" standpipe——		3,5,5	CL		plastic, inclusions of gravel.
┢╶┤	MD∦2	18/18	o xo stanapipe——	$\Pi \sqcup \sqcup$	3,7,18	, J		SILTY CLAY; yellow brown, slight moist, soft, slightly plastic.
5				!	3,7,10	ĺ		GRÄVELLY SAND; yellow tan, slightly moist, medium grained,
-	MD#3	18/18			2,24,25	l		moderately sorted.
t i						SP		
F -					1			
- 10 -			Bentonite/				1111	SILTY CLAY; brown-light gray, moist, very soft, moderate to
F 7		ł	cement grout—	- -	1 .			slightly plastic.
┢┤						CL		Moisture is picking up 10', water table must be close but
15		ļ		1: :				have not seen water.
┢┈┪		-				ł		SILTY CLAY; light gray, moist, very soft, plastic.
t 1	İ	1		 . .	1	СН		SILTY CLAY/CLAYEY SILT; gray, moist, very soft, plastic,
I⊢ d		i			1	MH		Inclusions of gravel.
F20H		- (1			20' connection had water in hole.
FJ	. 1	i			1	<u> </u>		
\mathbf{F}	j	J		,	1	SM		moderately sorted with some coarse sand. Mostly opaque with
254		- 1			[5M		black minerals.
- -		- 1		- -			<i>////</i>	Adding water to drill. Making water. SILTY CLAY; gray, moist, soft, plastic.
t 1		- 1		: :]			Size of Size of the Size of th
\mathbf{F}	l	İ	4" sch. 40 S.S.		<u> </u>	СН		
- 30-		-	5.55 · · · · ·		1			SILTY SANDY CLAY; gray and orange, soft, moist, moderately
F 7	}	}	:	F F :	l i			plastic, gravel inclusions.
l		1		;		SC-		CLAYEY SAND & GRAVEL; brown-tan, moderately sorted sand and gravel, fine to very fine sand and gravels.
35-		1				GC		· · · · · · · · · · · · · · · · · · ·
F 1	ì	ľ		,		SM		SILTY SAND; brown, moist, very soft, very fine grained sand, loose.
t 1	ŀ	j						
+		1		- -			300	SANDY GRAVELS; fine gravels, coarse sands, poorly sorted, angular to sub-angular, light gray-black, clear quartz,
40	1	I			1 1		જુટુ	stringers of silty clay, gray, soft, moderately plastic.
┡╶┤		l		$ \cdot $	i I		9	Making lots of water
t 1	Į	- }] ;	J J	l	જ્જ	,,
45	1	1][:		GW	૱ૢ	i
L 1	1	1		[:-] [::]			જુટ	
L 1	į	ļ				Ì	క్రిస్ట	
┠┈┪	j			,			တို့တို	1
L 50 d							žž	
1 4	ł	ł						SILTY CLAY; reddish brown, moist, soft, moderately plastic
t d						CL		1
55-		- 1					m	SHITY SAND GANDY DIAVIDLES EXCENT OF THE SECOND
F 1	ĺ	- 1				SM		SILTY SAND/SANDY CLAY; light brown, wet, loose, fine to medium grained.
F 1	}			:1 [1			88	GRAVEL; with coarse sand, black and opaque, fine gravels,
├ ┤	İ	. 1					ంద్ర	angular poorly sorted.
Feod	ſ	.	[[[GW	જુટી	
F 1	ŀ						88	
h -1	1	J			}	\dashv	199	SILTY SANDY CLAY; brown, moist, soft, moderately plastic.
65	ļ					CL		
₽ ~~	i	1		$ \cdot $ $ \cdot $	 			Making water SILTY SAND; light brown, wet, very fine grained, moderately
t d	Į	- 1	Į			SM-	臘	sorted, loose, with some medium grained sands, black
F 1	1	l		.		SM SP	뻬	minerals.
₽ 70 ₽		L		لطبله			шш	

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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... Creating a Safer Tomorrow

	~						BORING NO. W9-15(B2)
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	COORDINATES N.335.8260 FIELD GEOLOGIST E. Wessner EDITED BY D. Cox DATE BEGAN 8/1/88 CHECKED BY J. Hodsoll DATE FINISHED 8/4/88 TOTAL DEPTH 108 feet GROUND SURFACE EL. 18.8 ft.
70 -					sc-		SILTY CLAY; gray, moist, soft, moderate to very plastic.
E 3					SC- CH		Stinger of coarse sand at 74' angular, moderately sorted, black.
75 =					CL.		SILTY CLAY; gray, moderately molet, stiff, elightly plastic to plastic. Fine gravels grading to a fine—medium silty sand,
‡ ‡			Bentonite pellets				moderately sorted, runny, with some coarse grains of sand and gravel.
eo -					SM~ SP		Making water
E 3					3,		
- 85 -			4" .010 sch. 40				SILTY CLAY; light brown, moist, soft, very plastic to
			S.S. screen from 87.3 to 97.3 feet		CH-		moderately plastic. Drive samples from 86–89 ft.
F 3							SILTY SAND: fine to medium grained, opaque with black minerals, moderately sorted, loose.
90 -			Centralizer				
E					SM-		SILTY SAND; very fine grained to medium grained, grading to a cleaner sand with less water but still wet to 100°.
95 -			Centralizer		SW		
1 4			In sand				
100-					СН		SILTY CLAY; gray, moist, very soft, very plastic.
E 3					Ch		Very fine grained to medium grained sands with fine gravels
105					SW-		very poorly sorted, clear and black sands and gravel. Making water Hole backfilled with flowing sand to 102' (base of clay)
 					GW		Hole Edekined with howing sund to 102 (buse of city)
110							TOTAL DEPTH 108 FEET
[!		9.6"	-			
1 1							
-115							
FF							
120							
<u> </u>							
125	Ì						
F -	ļ						
$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	ĺ						
F = 1							
1.75							
F 7	j						
L ₁₄₀ 1	i	i		i			

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD_FILE: MW9 -15B2.DWG

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...Creating a Safer Tomorrow

						Γ	BORING NO. W9-27(B1)
JEPTH 11 FEET	SAMPLE TYPE & NUMBER	RECOVERY	WFLI, SUMMARY	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	PROFILE	COORDINATES N. 336,676.4 E. 1,548,653.8
							DESCRIPTION
- C -			12 Christy box		FILL	1111	FILL: coarse gravels and silty clay. SILTY SANDY CLAY; dark gray-black, slightly moist, medium
F 1			top of casing —				stiff, moderately plastic.
5 -					CL.		SILTY CLAY; light gray to mottled brown gray, moderate to slightly moist, slightly to moderately plastic.
<u> </u>			4" sch. 40 steel casing			668 688 688	GRAVELS; black and gray, very coarse to fine, angular, poorly sorted.
10 -			Bentonite/ cement grout		GW.		Fuel odor, (3—4ppm in mud bin), no water.
F 7						383	SILTY CLAY; brown—gray, moderately moist, medium stiff to
15					Ct.		∇soft, moderately plastic. Slight inflow of water.
1 1			, , ,				SILTY COARSE SANDS; angular to subangular, medium grained and some gravels, poorly sorted.
20					SP-		Stringers of silty clay, light olive gray, molst, soft, plastic.
1 1					CH		Strings 3 or Sitty Glay, Agrit Girlo gray, Molecu, process
1 1							
25							
$F = \frac{1}{2}$						111	SILTY CLAY; olive gray, moist, moderately plastic to plastic.
F							
30 4							SILTY CLAY; orange brown, moist, soft to medium stiff, plastic, mottled brown gray.
1 1			Bentonite pellets		СН		J. C. C. J. C. C. J. C. C. J. C. C. J. C. C. J. C. C. C. J. C. C. C. C. C. C. C. C. C. C. C. C. C.
35			33.8 to 35.8				CUTY CLAY AND A STANDARD STANDARD AND A STANDARD
F 3			4" .010 S.S.				SILTY CLAY; mottled gray brown, molst, stiff, moderately plastic.
E -			screen from 37.8 to 47.8		SP- CL		SANDY SILTY CLAY; with fine to medium sands, subangular, poorly sorted.
40			feet			///	SANDY CLAY; gray brown, wet, slightly plastic.
F 7			Centrafizer				
! 1							
-45-			Centralizer				CILTY CLAY, and become males as the second at the second a
է ქ			alC sand		CL		SILTY CLAY; gray brown, moist, stiff, moderately plastic, minor sand.
[]			AIC sand				
50, 4			Bentonite				
ļ 1			Backfill				
55	İ		9.6"				TOTAL DEPTH 53.2 FEET
F -							
F7							
F60 -							.
‡ ‡		Ì					
<u></u>	İ						
65							
F 4	ļ						
;							
L 70 L			L				

NOTE: Redrill of W9-27(B1), (7-19-88)

No samples taken while drilling this well. Samples taken during the drilling of the original W9-27(B1-abandoned) will be used as sample data.

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MW3 27B1.DW3

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...Creating a Safer Tomorrow

APPENDIX I

SECTION 10.0 - SITE 10 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

		Ī					BORING NO. GB#27
1334 N. PEB1	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadsoll FDITED BY D. H. Cox CHECKED BY J. Hodsoll TOTAL DEPTH 252 feet DESCRIPTION COORDINATES N. 337,187.5 E 1.551,008.7 DATE BEGAN 8/18/88 DATE FINISHED 8/19/88 GROUND SURFACE EL. 9.72 ft.
L c							SANDY CLAY; dark brown, dry, hard, non-plastic, brittle.
5 -	#1	0/84					
10 -	# 2	24/60					SANDY CLAY; dark brown, dry, hard, slightly plastic, orange oxidation, mudstone fragments.
15 -	# 3	0/60					SILTY SANDY CLAY; medium brown, moist, soft, non-plastic.
50-	# 4	10/60					sticky.
25 -	# 5	12/80					SILTY SANDY CLAY; medium brown, moist, very stiff, plastic.
30	#8	12/60					SILTY SANDY CLAY; medium brown, moist, stiff, medium plasticity.
35-	# 7	0/80			CL		SILTY CLAY; medium brown, moist, stiff, plastic.
40	# 8	24/60					
· - 45 -	\$ 9	18/60					SILTY CLAY; medium brown, moist, very stiff, highly plastic.
-50 -	# 10	48/60					SANDY CLAY; medium brown, molst, very stiff, plastic,
- 55 -	# 11	24/60					with mudstone fragments. SILTY CLAY; medium brown, moist, soft, plastic.
60 -	# 12	60/60					SANDY CLAY; gray brown, molat, very stiff, moderate plasticity, with iron oxidation stains.
-65	# 13	10/60					SANDY CLA'1; medium brown, moist, very stiff, plastic with mudstone fragments.
$[E_{70}]$	# 14	12/60					SILTY CLAY; medium brown, moist, medium stiff, plastic.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB27.DWG

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... Creating a Safer Tomorrow

							BORING NO. GB#27
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadeall EDITED BY D. H. Cox CHECKED BY J. Hadeall TOTAL DEPTH 252 fest DESCRIPTION COORDINATES N. 337.187.5 E 1.551,008.7 DATE BEGAN 8/18/88 DATE FINISHED 8/19/88 GROUND SURFACE EL. 9.72 ft.
10 -	#14	12/60			_		SILTY CLAY; medium brown, moist, soft, moderate plasticity.
75	p 15	20/60					SILTY CLAY; dark brown, mottled gray, moist, soft, sticky.
80 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	#16 #17	24/60			CL		
F 4		1					SANDY CLAY; medium brown, moist, soft, moderate plasticity.
90 -	<i>#</i> 18	4/60			ML		SANDY SILT; medium brown, very moist, very soft, sticky. SANDY SILTY CLAY; medium brown, very moist, very soft,
95 1	#19	12/60			C L		sticky. SANDY SILTY CLAY; medium brown, very moist, very soft,
120	#2 0	16/80					SAND; coarse grained.
- 105 -	# 21	0/60					
110	# 22	0/60			SP		
-115	# 23	0/60					CLAYEY SILT; dark gray brown, very moist, very soft, sticky.
120	#24	18/60			ML -		SAND; coarse grained.
125	# 25	0/80			SF 		SANDY CLAY; medium brown, slightly moist, stiff, very
130	#26	60/60					plastic.
135	#2 7	27/60			CL		
E,,,,	# 28	30/60					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB27.DWG

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...Creating a Safer Tomorrow

							BORING NO. GB#27
ᇤ	3ER			→	ಕ		• • • • • • • • • • • • • • • • • • • •
1 FEE	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL BURNES	MEASURED CONSISTENCY TSF)	SYMBOL	필	FIELD GEOLOGIST J. Hadsoll COORDINATES N. 337,187.5
7 7	SAMPLE E & NUI	S Z	WELL SUMMARY	SAS:	S)	PROFILE	FDITED BY D. H. Cox DATE BEGAN 8/18/88
EP 74	δÃ	, R		₹ģ	OSCS	ª	CHECKED BY J. Hodggil DATE FINISHED 8/19/88 TOTAL DEPTH 252 feet GROUND SUPFACE EL. 9.72 ft.
n	۲						DESCRIPTION
140-	∮ 28	30/60					SILTY CLAY; gray brown, stiff, plastic.
+ +							
1 1]]]			
- 145 -	∦ 29	60/60					
┝╶┤		 					
F 7				1 1			SILTY CLAY; gray, moist, very stiff, plastic.
150	# 30	60/60					
╁┪							
1 1							
- 155 -	# 31	60/60			CL		
F 3					Ų.		SANDY CLAY; gray brown, molet, very etiff, moderate plasticity.
F 1							· · · · · · · · · · · · · · · · · · ·
160	#32	20/60					
F +							SANDY SILTY CLAY; medium brown, moist, stiff, sticky.
1 1							
- 165 -	#33	8/60		1			
F							SANDY CLAY; gray brown, moist, hard, non-plastic, brittle.
t 1				1			2000 C C C C C C C C C C C C C C C C C C
170	#34	54/60					SANDY SILTY; gray brown, moist, very stiff, moderate plasticity, iron oxidation staining.
F 7							CLAYEY SAND; gray, molet, very stiff, 40% sand, 10%
1 1							gravel and seashells.
175 -	#35	6/60			sc		
F7							SANDY CLAYEY GRAYEL; gray, moist, stiff, angular mudstone
1 1							clasts.
180	#36	12/60	1		GC		
1						111	SANDY CLAY; gray, moist, very stiff, moderate plasticity,
1 1							with coarse angular, 11thic fragments.
185	#37	10/60	[CL		
F 7							CLAYEY SAND; moist, very stiff, brittle, (50% sand).
t 1		1					The same the same to be said to the same same.
190-	# 38	12/60			sc		
F 7						1999	SANDY CLAY; medium brown, moist, very stiff, moderate
t 1	1						plasticity, with coarse grained sand.
- 195 -	#3 9	24/60					
F 7		$-\!\!-\!\!\!-\!\!\!\!-$		1			
t 1	ł						
- 200 -	#40	0/60		ļ	_ [
F 1					α.		
t 1	ļ						
205	# 41	31/60		- 1			
F 1							1
t d	#42	0/60		ł			į (
[210]	l						

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB27.DWG

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...Creating a Safer Tomorrow

				T	_	T	DODING NO CD //27
15	띮	1			ر ا		BORING NO. GB#27
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	9	FIELD GEOLOGIST J, Hadsall COORDINATES N. 337.187.5 E 1.551,008.7
DEPTH IN	19 %	Ş <u>₹</u>	WELL SUMMARY	SIST	ŝ	PROFILE	EDITED BY D. H. Cox DATE BEGAN 8/18/88
EP 1	ે મ	RE.		¥8°	nscs	•	CHECKED BY J. Hodsall DATE FINISHED .8/19/88 TOTAL DEPTH .252 feet GROUND SURFACE EL. 9.72 ft.
a	7				ر		
- 210 -	#42	0/60				M	DESCRIPTION CLAYEY SAND; fine grained.
-		-					
F 7					sc		
215	#43	0/60					
l d							SANDY CLAY; medium brown, moist, stiff, plastic, with
FF		- /					gravel clasts.
-220-	#44	3/60					
<u> </u>					CL		SILTY CLAY; dark brown, moist, very stiff, plastic.
F -}							
-225	# 45	30/60					
t f							SANDY CLAYEY SILT; dark brown, moist, very stiff, moderate
F -		24 /00			ML		plasticity, 50% silt, 5% sand.
230	# 46	24/60		}	W. C.		
t t							SILTY CLAY; dark gray brown, moist, very stiff, hard, plastic.
F -	# 47	26/60)]			
-235	# ~/	26/60			CL		
t d							
-	# 48	30/60					CLAYEY SANDY SILT; moist, dark brown, very stiff, plastic.
240-	y -0	30,00			ML		in the state of th
1 1							SANDY CLAY; dark gray brown, moist, very stiff, moderate
245	# 49	2/60					plasticity.
F "-	-		ļ				
F 7					CL		CANDY Of AV. dayle area beauty and the control of t
250	4 50	30/60					SANDY CLAY; dark gray brown, moist, very stiff, low plasticity.
F 4		ĺ	1				
FF							TOTAL DEPTH 252 FEET
255			}		ĺ		4-1/2" diameter boring
t 1	1						
}	j]			١.	
260			, ,				
‡ ‡		-			- 1		
Εď				' <i>'</i>			l
-265-	ĺ						
F 7	ł	1			ŀ		
1 1	ļ]				
270-	ļ	ļ			J		
F 7					ļ		
<u> </u>	1				ļ		
275	- 1	- 1			Ì		
F 7	Į	ļ			Ì		
t 1	1			1	ŀ		
L ₂₈₀ _	i			i			

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB27.DWG

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	~						BORING NO. GB#30
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadsall EDITED BY D. H. Cox DATE BEGAN 9/19/88 CHECKED BY T. Ault DEPTH 252 feet GROUND SURFACE EL. 19.05 ft. DESCRIPTION
E 3							Asphalt CLAY; dark brown, slightly molst, very stiff, very plastic.
117711 5					СН		
10	# 1	0/60				90000 00000	SANDY GRAVEL; multicolored, wet, loose, subangular, multilithic, coarse sand.
15	#2	0/60				දිය සේ යදීය යු ය	
20	#3	0/60			GW	්ත් ක්කේක්ත් රජිත්ත්රීන්ත්ත්	
- 25	#4	0/60			-		
30	#5	36/60		0.25- 4.25			SILTY CLAY; dark gray, molst, soft, non-plastic.
-35-	#6	0/60					
40	#7	0/60			CL		
45	#8	0/60					
- 50 -	# 9	12/60		1.0			SANDY CLAY; medium brown, moist, hard, moderate plasticity.
-55 -	#10	0/60				ૡૺૡૺૡૺૡ ઌઌઌઌઌઌ	SANDY (PAVEL; coarse, multilithic, subangular.
60	#11	0/60			GW	ර්ත්ත්ත්ත්ත් මත්ත්ත්ත්ත්ත්	
-65 -	#12	0/60			_	2000 2000 2000 2000 2000	SANDY CLAY, modium beams miles beild beild.
E 70 1	#13	36/60		4.0	CL		SANDY CLAY; medium brown, molst, hard, brittle, coarse sand and gravel dispersal throughout.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AUTOCAD FILE: MF-GB30.DWG

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... Creating a Safer Tomorrow

_							BORING NO. GB#30
FEET	SAMPLE TYPE & NUMBER	.		رٍدٍ ۾	BOL		COORDINATES N. 334.869.1
Z.	MPLE & NUI	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	EDITED BY D. H. Cox DATE BEGAN 9/19/88
CEPTH IN	SA YPE	REC		CON	uscs	ă	CHECKED BY T. AUIT. DATE FINISHED 9/20/88. TOTAL DEPTH 252 feet GROUND SURFACE EL. 19.05 ft.
- 77 -	-						DESCRIPTION SANDY CLAY; medium brown.
-	#13	36/60					SANDI GLAI, Medium brown.
75	#14	0/60					
F =	,						
ļ :	<i>#</i> 15	0/60					
- 80 -	#13	0,00			CL		
- 85 - 	# 16	0/60					
E							
90 -	#17	0/60					
							SAND; coarse, angular.
95 -	# 18	0/60			SP		
E 3]	•				SILTY SAND; fine grained.
-100 -	# 19	0/60					
F 7		ļ					
105 -	#20	0/60					
† ‡							
110	#21	0/60					
F']	# = '						
L d							
- 115 -	#22	0/60					
[]					SM		
120	#23	n/60					
.125	#24	0/60					
[]	-	·					
- 30	# 25	0/80					
F 7							
-135-	#26	0/60					
["]							
1	#27	0/60					
1 110 7	<u>:</u>		·			шш	<u>, ,,,,,,,,,,,,,,,,,</u>

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB30.DWG

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...Creating a Safer Tomorrow

	-		-				BORING NO. GB#30
S DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST J. Hadsall EDITED BY D. H. Cox DATE BEGAN 9/19/88 CHECKED BY T. Ault DEPTH 252 feet GROUND SURFACE EL. 19.05 ft. DESCRIPTION
F '4'	#27	0/60					SILTY SAND; fine grained.
145	# 28	60/60			SM		
150	₽ 29	60/60		2.75			SILTY CLAY; gray brown, moist, very stiff, plastic.
15%	# 30	60/60		4.5			
160	# 31	60/60		4.5			
165 -	# 32	14/60		4.5			
170	# 33	40/60		3.75			
- 1	#34	60/60		3.5- 2.75			SANDY CLAY/CLAYEY SAND; gray brown, very stiff, non- plastic, medium grained.
180	# 35	36/60		3.25	CL		SILTY CLAY/CLAY; gray, moist, very stiff, very plastic.
- 185 - 185	# 36	60/60		4.5			SILTY CLAY; gray to moderate brown, moist very stiff, sticky.
19/1	# 37	60/60		3.0			SANDY SILTY CLAY: light gray maint was attended
195	# 38	50/60		3.75			SANDY SILTY CLAY; light gray, moist, very stiff, moderate plasticity, 10% coarse angular mudstone fragments, dark gray.
200	# 39	60/60		2.75- 4.5			SILTY CLAY; dark gray, moist, hard, low plasticity.
205	#40	46/60		0.25 2.0			Grades to dark gray, dense, moist, soft, non-plastic. SILTY CLAY; dark gray, moist, hard, low plasticity.
E 217	# 41	0/60					

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California ...Creating a Safer Tomorrow

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: MF-GB30.DWG

							BORING NO. GB#30
SEPTH NI FEET	SAMPLE SAMPLE	RECOVERY (IN.)	WELL SUMMAR	MEASURED CCHSISTENCY (TSF)	TOBWAS SOSA	PROFILE	FIELD GEOLOGIST J. Hodsoll FDITED BY D. H. Cox DATE BFGAN 9/19/88 CHECKED BY T. Auit DATE FINISHED 9/20/88 TOTAL DEPTH 252 feet GROUND SURFACE EL. 19.05 ft. DESCRIPTION
- 21/) -							SILTY CLAY; medium brown, molst, stiff, low plasticity.
- 215	# 42	48/60		2.25			
-220	#43	12/60		4.5	CL		
-225	#44	60/60		4.5			
230	# 45	60/60		4.25			Grades to dark brown color, small 1/4" sand zones intersersed throughout, increasing plasticity.
235	#46	0/60			SM		SILTY SAND; fine to medium grained.
240	#4 7	20/60	,	3.75			SANDY SILTY CLAY; dark brown, moist, very stiff, moderate plasticity, some sand (5—10%).
-245	# 48	4/60		3.75	CL		·
250	# 49	30/60		3.75			
-255							TOTAL DEPTH 252 FEET 4-1/2 diameter boring
260-							
265							
2-0							
275							

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

...Creating a Safer Tomorrow

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	nr.					i	BORING NO. $W10-5(A)$
	MPLE & '\∪MBER	>		7. ~	ğ	l.,	
,	SAMPLE E & 'ON	RECOVERY (IN.)	WELL SUMMARY	BLCMS CH SAMPLER (PER 6	SYMBOL	PROFILE	COORDINATES N 337,187.5 [BLE GEOLOGIST J. Hadsall COORDINATES E 1,551,008.7
표	N/A	02 € 03 €		SAMA PER		8	FONED BY D. H. Cox DATE BEGAN 8/3/88 CHECKED BY J. Hadsall DATE FINISHED 8/3/88
CEP TH	SA	α ·		un "'	nscs	_	CHECKED BY J. Hadsall DATE FINISHED 8/3/88 TOTAL DEPTH 20 feet GROUND SURFACE EL. 9.7 ft.
) -						DESCRIPTION
1			12" Christy box				SILTY CLAY; dark brown, dry, non-plastic, trace of grass
-	MD#1	6/18	4" sch. 40 steel	7,7,13			roots.
F 7	MD#2	8/18	Bentohite/	10,15,24]		
5 5	MD#3	6/18	Bentonite pellets	14,26,30	Cl.		08:30,8/4/88
F 3	MD#4	12/18	6.2 to 7 ft 	5,8,8			SANDY SILTY CLAY; gray brown, moist, with oxidized mudstone fragments.
t i	s	18/24	4" .010 S.S.		l		
-10-		<u> </u>	8 to 13 ft		sc-		SILTY CLAYE' SAND; brown, moist, soft, orange oxidation with mudstone fragments.
1 1		74.60	Centralizer	l	SM		SILTY SAND: gray brown, wet (saturated), loose, medium,
╟┤	S	34,160	#1C appl		ļ	1111	grained, (10% silt). SILTY CLAY; brown, moist, soft, sticky, no plasticity.
F 15			#IC sand				z z z z
<u> </u>					CL		
F 7	s	60/60	Bentonite				
L 1			backfill -				
[[2]							TOTAL DEPTH 20 FEET
t 1			 12"	-			
F 4							
25							
┠┤							
1							
- 30 -							
F]	ĺ						
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t 1						- }	
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DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

				7			DODING NO WIO G(C)
5	83			İ	_ ا		BORING NO. $W10-6(C)$
FEET	9	``````		8 €	SYMBOL	щ	COORDINATES N. 334,869.4 FIELD GEOLOGIST R. Duncan
z	SAMPLE TYPE & HUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	S S	PROFILE	FIELD GEOLOGIST R. Duncon E 1,553,189.6 EDITED BY D. Cox DATE BEGAN 9/29/88
ЕРТН	SAN	ĘĊ,		BB & H	USCS	ď	CHECKED BY J. Hodsoll DATE FINISHED 10/3/88
بر بر	4	"			S		TOTAL DEPTH 178 feet GROUND SURFACE EL. 18.9 ft.
- 0 -					<u> </u>	L	DESCRIPTION
- -	MD#1	7/18	12" Christy box————————————————————————————————————	7,11,14	ł	l	Asphalt 0 – 4". FILL: light olive gray sand with trace of silt and gravel, dry.
			l Unit		fil.		Strong hydrocarbon odor.
- 5 -	MD#2	8/18	Top of casing—	6,6,7		,,,,	SILTY CLAY; pale yellowish brown, slightly moist to moist,
F 3 -	MD#3	17/18		5,7,15	CL		medium plasticity, trace of gravel.
t :					<u> </u>		SAND; light olive gray, moist, loose to medium dense, trace
	MD#4	12/18		5,7,5	SM		♥of silt and gravels.
L ¹⁰			4" ech. 40 steel			88	SAND/GRAVEL; light olive gray, very moist to wet, loose,
┣ -			casing	1		90	sand is subangular, predominantly quartz and feldspar gravels are subangular to subrounded, metamorphic
					GW	Ϋ́Ž	Increasing clay, color change to moderate brown.
→ 1.55 →			[7] [3			90	
	1					111	SANDY CLAY; brownish black, moist, soft, medium plastic.
-				1	ļ		
20-			Bentonite/cement	:	CL		
t i			grout]	ļ		
-				1	<u> </u>		GRAVEL; loose, with sand.
25				1		త్రిక్ర	5.1.7.22, 1005, III 55.1a.
-					GW	000	
-				1	<u> </u>	ĞĞ	CLANEY COAUTI. Habballing and James
1 70					GC		CLAYEY GRAVEL; light olive gray, loose. Gravels grading finer.
F 7				.]			SAMDY CLAY; light olive gray.
t i]			SARST VIEW, Hight onve gray.
				1			
1000]	CL		
┠╶┤				1			
-40-				1 1		<i></i>	GRAVEL; olive black, loose, angular.
F 7							
1 1				1 1			
-45-	[[,] [,] [
F 7		1					Clay with sond and gravel layers
		1		1			Clay with sand and gravel layers.
50-		l		1	GP		
							000051 11 11 11 1
}	1	- 1					GRAVEL; olive black, loose, pea size, very angular.
1554		İ					
<u> </u>	1			1			
F 7		Ì					
60	j						CLAY; moderate yellowish brown, with trace of sand and
F			├ - } - ! - ·	1 1			occasional lens of sand and gravel.
<u> </u>	1			 			1
+]]	CL		
F 65		ŀ					
├ ┤							Increase in sand content.
1 1		ł		1 1			
Lynd	L					1111,	<u></u>

DRILLING CO.: Water Development Co.

DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified

S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

...Creating a Safer Tomorrow

PAGE 1 OF 3

							BORING NO. $W10-6(C)$
JEPTH N FEET	JAMPLE TYPE & YUMBER	RECOVERY ('N.)	WCCL SUMMARY	BLCMS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	FIELD GLOLOGIST R. Duncan EDITED BY D. Cox CHECKED BY J. Hadsall TOTAL DEPTH 178 feet DESCRIPTION COORDINATES N. 334.669.4 E. 1,553,189.6 DATE BEGAN 9/29/88 DATE FINISHED 10/3/88 GROUND SURFACE EL. 18.9 ft.
- ~ -			ř. [:				SANDY CLAY; light brown, moist, soft, slightly plastic.
					CL		
- R7 -			4" sch. 40 steel	1			
			casina		sc		CLAYEY SAND: coarse, subangular to subround, moderately sorted, clay, light brown, moist, soft, plastic.
85 T			Bentonite/cement				CLAY; light olive gray and yellowish brown, moderately plastic, with stringers of coarse sand. Coarse sand with trace of pea-size gravel lenses are present in section.
25 20 20 20 20 20 20 20 20 20 20 20 20 20			grout		CL		SANDY CLAY; yellowish brown, light olive gray, molst, soft, slightly plastic.
L 4							
L,,5		1					GRAVELLY SAND; coarse, subangular, subround, moderately
F -					SP		sorted.
E		{					
E 3		l					CLAY; light alive gray, medium plasticity, coarse sand, ped sized gravel lenses.
F. 7							
\mathbf{E}		}					
$E \exists$		j					SILTY CLAY: light olive gray, moist, stiff, slightly plastic.
F. 17					CL		
FF	Ì	1					
F 7		j					
- ' '							1
F 7							CLAY/SILTY CLAY; olive gray, moist, stiff, slightly plastic.
[]	l						

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

							BORING NO. $W10-6(C)$
S SEPTU 1 FEET	SAMPLE TYPE & HUMBER	RECOVERY ('N.)	WELL SUMMARY	BLOWS ON SAMPLER PER 6")	USCS SYMBOL	PROFILE	COORDINATES N. 334.869.4 FIELD GEOLOGIST R. Duncan EDITED BY D. Cox DATE BEGAN 9/29/88 CHECKED BY J. Hadsall DATE FINISHED 10/3/88 TOTAL DEPTH 178 feet GROUND SURFACE EL. 18.9 ft. DESCRIPTION
150 - 150 -			Bentonite pellets 154.5 to 163 feet. 4" .010 S.S. screen from 166 to 171 feet. Centralizer #1C sand Bentonite and 1C sand.		GW CL		SILTY CLAY; olive gray, molst, stiff, moderate plasticity. GRAVEL; medium gray to dark greenish black, loose, poorly graded, trace coarse sand, gravels predominantly subrounded. CLAY; light alive gray, medium plasticity. CLAY; brownish black, soft, medium plasticity. TOTAL DEPTH 178 FEET

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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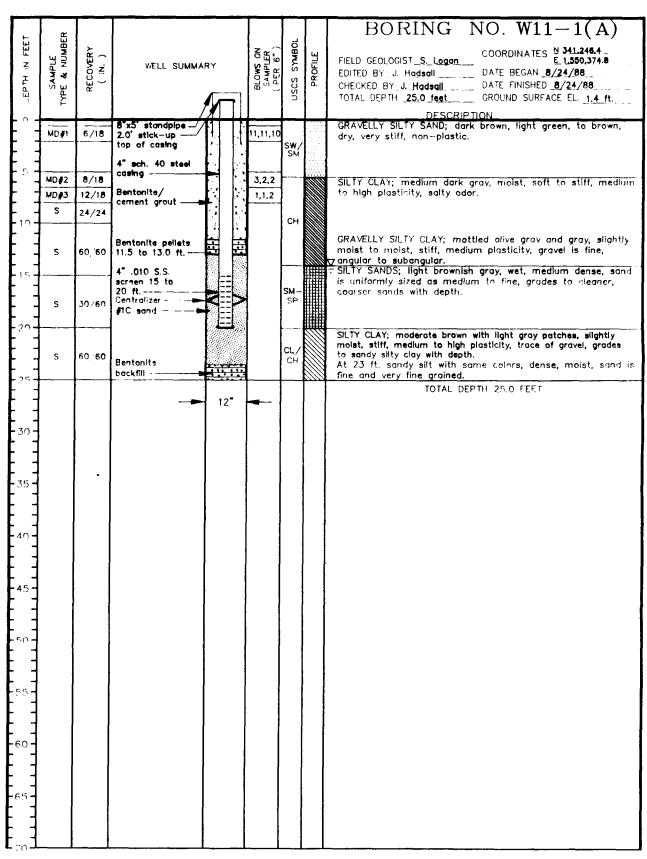
...Creating a Safer Tomorrow

APPENDIX I

SECTION 11.0 - SITE 11 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988



DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

AUTOCAD FILE: NEWIT-TA.DWG

CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

		· -			_	r —	DODING NO WILL OVAN
L	gς				١.	ŀ	BORING NO. $W11-2(A)$
FEET	MBE	. ☆	!	Z ĸ	SYMBOL	ш	COORDINATES N. 341,444.3 E. 1,550,241.1
<u>z</u>	SAMPLE E & NUMBER	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER PER 6")	S	PROFILE	
g E	SAM :	ີ <u>ຜູ</u> ້ -		SAN SAN PE	SCS	ă	EDITED BY J. Hadsall DATE BEGAN 8/25/88 CHECKED BY J. Hadsall DATE FINISHED 8/29/88
۵	3.4 TYPE	l œ			SC		TOTAL DEPTH 80 feet GROUND SURFACE EL. 1.7 ft.
			<i>[</i>]				DESCRIPTION
[']	MD#1	8/18	8 x5 standpipe— 2.0 stick-up	6,6,6			SILTY SANDY GRAVEL; light brown, dry, loose (top soil).
t 3			top of casing		GM	ШН	
F -			4" sch. 40 steel				SILTY CLAY; medium gray and medium dark gray, moist,
5 -	MD#2	11/18	casing	1,1,0	1		soft, high plasticity, becomes drier and less plastic with
F -			Bentonite/		1		depth, many organic fibers (roots), trace of coarse sand.
t i	S	42/42	cement grout		сн~		
- 10 -					CL		SILTY CLAY; medium to light gray with green spots, very
-							moist to wet, soft to stiff, medium to high plasticitty,
	S	45/60					trace of medium grained sands, color grades to browner shades with depth.
15			Bentonite pellets				·
F ' -			4" .010 S.S. screen 17.5 to				CLAYEY SILT; moderate brown with light gray spots, moist, stiff, low plasticity.
t =	s	60/60	22.5 ft				moist, still, low plusticity.
1 -			Centralizer				및 SANDY SILT; moderate brown and light gray, wet, soft, low
<u> </u>					ML		plasticity, sand is uniformly medium and fine grained.
	s	60/60	#10 sand				SANDY SILT; moderate brown and light olive gray, moist
t i	.	, '					to slightly moist, very stiff, low plasticity.
72.			Bentonite and arout backfill				© 24 ft. small layer with fine angular gravels in with silts.
t d	_	an (nn	droot blacking				SILTY CLAY; moderate brown, moist, very soft to soft, high
$\mathbf{F} = \mathbf{I}$	S	60/60					plasticity, trace of m edium rounded sands.
30					сн		
L							
ŀ 1	s	60/60					
FF							SANDY SILT; pale brown, wet, soft, low plasticity. CLAYEY SILT; grayish olive with grayish yellow streaks,
- 35 -					ML		slightly moist to dry, very stiff to hard, low plasticity.
F 4	s	60/60					
t d					a./aн		SILTY CLAY; light brown and moderate brown, moist,
400-							soft to stiff, high to medium plasticity, fine subang. gravel SANDY SILT; medium brown, wet, stiff, low plasticity,
1 1		/			ML-		grades to predominantly clean, brown and black medium
1	S	30/60			SP		arained sand.
45							
 			[,3,5]				SAND; medium brown and black, wet—saturated, medium dense, dries out with depth, relatively clean.
t 1	s	28/60		- 1			The state of the s
} -			[.;:4]				
50-			[3, 13]	ļ			
├ ┤	s	55/60		-			1
t d	-	, , , ,					1
55				ľ	-		Sands as above, but with more fine grained sand, wet—
t 1			; . ; .				saturated.
1 1	s	10/60			SP		
60-							
For.			[SAND; moderate brown and black with some white, wet— saturated, medium dense, poorly graded.
t	s	30/60		- 1			adicirated, medium dense, poorty graded.
F 1		-	19.5				İ
F65-			1:3:31				1
F]	s	14/60		İ			ł
t d	٦	14/60					
[-a1	1		<u> </u>	l			

DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stern Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 2



...Creating a Safer Tomorrow

			₁		,	_	DODAY OF THE
1 5	ER			1		1	BORING NO. W11-2(A)
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		S. E. S.	SYMBOL	ш	FIELD GEOLOGIST S. Logan COORDINATES N 341.444.3 E 1,550,241.1
Ĕ Į	AMPL & N	S Z	WELL SUMMARY	BLOWS ON SAMPLER	S S	PROFILE	EDITED BY J. Hadsall DATE BEGAN 8/25/88
OEPTH IN	S. YPE	RE)		1 g 0 7	uscs	1	CHECKED BY J. Hadsall DATE FINISHED 8/29/88 TOTAL DEPTH 80 feet GROUND SURFACE EL. 1.7 ft.
70	. <u> </u>					1	DESCRIPTION
F					SP		SAND; moderate brown and black with some white, wet, medium dense, moderately graded.
FF	s	30/60	Bentonite/		GW	38.	, ,
F 75					SM		SILIY SAND; moderate to light brown, wet, stiff, fine sand.
F 7	s	32/60					SAND; moderate brown and black with some white, wet saturated, medium dense, predominantly clean, poorly graded.
F 1	Ĭ	02,00			SP		
Pn +				 	<u> </u>		TOTAL DEPTH 80 FEET
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F 7							
[135]	}	1			ł		
F ‡							
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DRILLING CO.: Water Development Co. DRILLING METHOD: CME 55 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MEW11-24 DWG

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...Creating a Safer Tomorrow

APPENDIX I

SECTION 12.0 - SITE 12 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

	-						
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	BORING NO. W12-1(A) COORDINATES N. 338.009.7 E. 1.549,044.8 CHECKED BY J. Hodeall CHECKED BY B. Manchon TOTAL DEPTH 35 feet DESCRIPTION COORDINATES N. 338.009.7 E. 1.549,044.8 DATE BEGAN 9/7/88 DATE FINISHED 9/8/88 GROUND SURFACE EL. 8.9 ft.
F° 7		7.48	12" Christy box	0.44.40			SANDY CLAY; yellowish brown, damp, soft to medium stiff, low to non-plastic.
‡ ‡	MD#1	7/18	top of casing	9,11,12	CL		tow to non prestic.
5 -	MD#2	10/18	4" sch. 40 steel	10,18,30	 		SAND; moderate yellowish brown, molst, loose, fine to
‡ =	MD#3	15/18	Bentonite/	8,8,29	SM-		medium, traces of silt and clay, little pebbles.
‡ 7	MD#4	12/16	cement grout	6,6,11	CL-		SILTY CLAY/CLAYEY SILT; light gray to light yellowish gray, damp, soft to medium stiff, low plasticity.
-10-	s	ND			SM-		SAND; light gray, wet, loose, trace of silt and clay. ▽
F 7		~					TCILTY CLAY; light yellowish gray, moist very soft, low plasticity.
15 -	s	60/60					,,,
FF							Wet, soft, more silt.
F., 3					CL		,,
20 -	S	60/60	Bentonite pellets				Very stiff, low plasticity.
F 7			22 to 23 ft.				,,
25	s	60/60	4" .010 S.S.				
F 7			4* .010 S.S. screen from 24 to 29 ft. Centralizer ●		SM		SAND; wet (saturated), medium dense, with silt and clay.
F7			29 feet				SILTY CLAY; yellowish brown, wet, medium stiff, with gravel.
30 -			IC sand		CL		SAND; yellowish brown, wet (saturated), fine to medium,
F 7			Bentonite		SM		trace gravel, pebbles and cobbles. SAND/GRAVEL: yellowish brown, wet (saturated), loose, with
35			backfill		5P/GM		traces of silty clay.
F 7			_ 10"	_			TOTAL DEPTH 35 FEET
F - 1			12"				
40 1							
‡ ‡							
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‡ 1				ľ			
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‡ ‡				ļ			
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<u> </u>							
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EE	}			1	İ		
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DRILLING CO.: Water Development Co.
DRILLING METHOD: CME 55 Hollow Stern Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



... Creating a Safer Tomorrow

					_		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	<u>~</u>]		1	١.		BORING NO. $W12-2(A)$
FEET	SAMPLE TYPE & NUMBER	>		z ~ ^	SYMBOL	١	COORDINATES N 338,270,3
<u>د</u>	별호	RECOVERY (:N.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6°)	₹	PROFILE	FIELD GEOLOGIST G.L. WILLIAMS COORDINATES N. 338.270.3 E. 1.549.017.0
Ī	SAMPLE E & NU	CO ×	WELL SOMMAN	PA A	S	Ď	FOITED BY J. Hadeall DATE BEGAN 9/8/88
DEPTH 'IR	N M	Ä.		ᆿᇲᇎ	SOS	٩	CHECKED BY B. Manchon DATE FINISHED 9/9/88
ី	Ε	İ			7	l	TOTAL DEPTH 32.8 feet GROUND SURFACE EL. 9.0 ft.
- 0 -		ļ				L	DESCRIPTION
- -	140.61		12" Christy box	21,30,18	sw		SAND; dark yellowish brown, moist to dry, fine to medium sands with gravel and pebbles/cobles.
t i	MD#1	8/18	top of casing	21,30,16	٥,,		
F -	MD#2	9/18	4" sch. 40 steel	5,8,12	OL	993	SILTY CLAY; yellowish brown, moist, stiff, low plasticity, trace
- 5 -	MD#3	9/18	casing	7,6,7		111111 111111	sand, trace pebbles. CLAYEY SILT; grayish orange, moist to dry, stiff, low
		1	Bentonite/		ML		plasticity, trace gravel.
-		1	cement grout			ЩЩ	
10		60/60			CL- ML		SILT and CLAY; dark greenish gray, moist to damp, stiff, low plasticity, some gravels.
- -	S	60/60			CH		
F -					- Cn		CLAY; damp, soft, to med. stiff, mod. to high plas., tr. silt. SILTY CLAY; moderate yellowish brown, wet (saturated).
							stiff, low plasticity.
- 15 -	s	60/60	i. .i.		ŀ		
t i					l		
F 7							
		•	l Million		CL		
20	S	60/60			"		
F 7			Bentonite pellets		ļ		Some gravels and sand.
I			1 II II				some graveis and sand.
25	s	60/60	#1C sand				
 	5	60/60	26 feet				
t i	·		4° .010 3.S.			7777	SAND; moderate to dark yellowish brown, wet (saturated),
F 7			screen from		SP		loose, fine, with little gravel.
- 70 -	s	50/60	Centralizer ●			171171	Becomes dark grayish green and silty.
1. 1			31 feet. ———————————————————————————————————	·	ML		CLAYEY SII.T; dark greenish gray, damp, very stiff, low to non-plastic, some gravels.
┡┤			DENTA TO LUCKIMIZE			,,,,,,,,	TOTAL DEPTH 32.8 FEET
35							
L., 1		i •]	12"				
\mathbf{F}							
t 1							
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DRILLING CO.: Water Development Co.
DRILLING METHOD: CME 55 Hollow Stern Auger

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

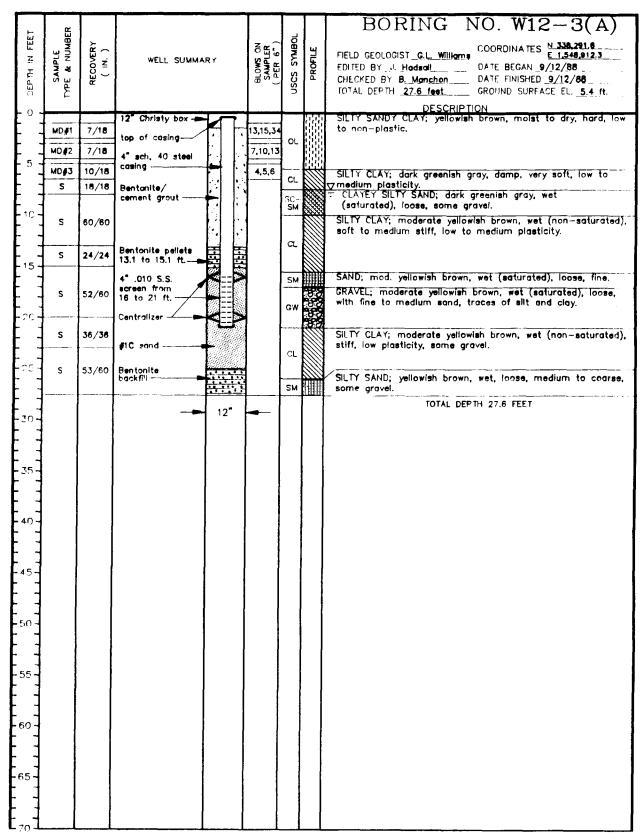
CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: W12-2A.DWG

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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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APPENDIX I

SECTION 14.0 - SITE 14 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

					-		BORING NO. GB#28
D DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	COORDINATES N.333,680.8 FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 260 feet DESCRIPTION COORDINATES N.333,680.8 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 E 1,549,926.3 DATE FINISHED 8/B/88 GROUND SURFACE EL. 30.4 ft.
F							Asphalt; fill material. FILL: sandy clayey gravel; gray to brown, coarse and fine
F	#1	0/60			FILI.		grained, angular, with sand; coarse to medium grained.
5 1 1 1	#2	18/60		2.5- 3.0	MI.		CLAYEY SILT: mottled gray, brown to tan and cream, dry, stiff to very stiff, low to medium plasticity, trace of rounded, medium grained sand, trace of wood fibers.
10					GC		SANDY CLAYEY GRAVEL; black to brown, gravel is fine grained, angular, sand is coarse to medium grained, low to
ĿЫ	#3	3,/60		0.8			medium plasticity, trace of wood fibers.
- 15 -					CL		SANDY SILTY CLAY; gray and light brown, with cream potches, moist, soft, high plasticity, sand is medium to fine grained, subrounded to rounded.
1 1	#4	0/60				950 950 950	SANDY GRAVEL; gray, gravel is fine and coarse grained, subrounded to rounded, sand is coarse to medium grained,
20						9 9 9	significant fraction of woodlike, fiberous chips, brown, do not float in water.
1	# 5	0,/60			GW		do not nout in water.
1	#3	0,60			GW	300 300 300 300 300 300 300 300 300 300	
25						90	
Łź	#6	0/60				30	
F,,-				İ		99 99	
-30 - - -35	# 7	0,160			sw		GRAVELLY SAND; black to tan, sand is coarse to fine grained, rounded, gravel is fine, subrounded. Prevalent wood chips and fragments to 5mm long, no odor.
	# 8	10/60		4.0- 4.5	ML		CLAYEY SILT; mottled dark gray and dark brown with cream patches, slightly moist, hard, medium to low plasticity, trace of fine sands, no odor.
40					CL- ML		CLAY, CLAYEY SILT; dark brown with dark and light gray, dry to slightly moist, medium plasticity, no odor.
	å ∂	20/60		2.0 2.5	NIL.		CLATEY SAND; black and gray, coarse to fine grained, rounded.
- 45 -				$\neg \neg$			
 	#10	0/60					
50							
<u> </u>					į		Trace of fine gravel and wood fibers — very thin (splinters) to 1.5" long.
$ar{b}$	#11	0/60			sc		
55					3C		Small gray clay lens (2" thick), interbedded, moist, soft,
F 7	#12	0/60					very high plasticity.
F 🗗	"	, , ,					
-60 -							i
!	# 13	0/60					CLAYEY SAND; black to brown, predominantly medium grained, subrounded.
65				<u>.</u> [-
F"'-							SILTY CLAY/SANDY SILT; clay is dark brown with gray streak:
F 🚶	#14	18/60		2.25 2.75	CH ML		dry, very stiff, high plasticity, silt is brown, moist, very stiff, low plasticity, sand is fine to very fine grained.
t1	l						in productly, dend to mile to very line grande,

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: ME-GB28.DWG

					Ī		BORING NO. GB#28
S LEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 260 feet DESCRIPTION COORDINATES N. 333,60.8 E. 1,549,928.3 DATE BEGAN _8/5/88 DATE FINISHED _8/8/88 GROUND SURFACE EL30.4 ft.
70 -	/ 15	0/60			sc		CLAYEY SAND; black and gray, medium to coarse grained, subangular to subrounded.
80 -	# 16	12/60		0.4- 1.1	CL- CH		SILTY CLAY; grading to sandy clay. Silt is orangish brown with light gray spots, moist, soft, high plasticity, sand is coarse to medium, subrounded. SILTY CLAY; light and dark gray, moist, very stiff to hard, high plasticity, trace of fine grained sands.
85 -	₽ 17	30/60		2.3 4.2	СН		CANDY CILTY CLAY, light become and array alightly resign
- 92	# 18	24/60		1.3			SANDY SILTY CLAY; light brown and gray, slightly moist, stiff, medium to high plasticity, sand is coarse to medium grained. CLAYEY SAND; light brown, soft, medium plasticity, sand is
95	# 19	0/60			sc		coarse to medium grained, subangular to subrounded. SANDY SILTY CLAY; tan to mottled dark gray, brown, tan,
-100	# 20	5/60	·	2.0	CL		slightly moist, high to med. plasticty, sand is fine to v. fine. CLAYEY SAND; gray, coarse to fine, predominantly medium grained, angular to subrounded.
105	# 21	0/60			SC		SILTY CLAY; dark gray and brown, slightly moist to moist,
-110	#22	50/60		0.7 1.5	СН		stiff, high plasticity, trace of fine sand. SILTY CLAY; brown with gray patches, dry, very stiff, medium
-115	#23	46,/60		3.25	CL		plasticity. CLAYEY SILT/SILTY CLAY; clayey silt is mottled gray and
-120	#24	30/60		0.75- 4.25	CH		brown, dry, hard, low plasticity, silty clay is tan and brown, moist to very moist, soft, high plasticity. CLAYEY SAND; tan, coarse to med, grained.
F =	# 25	36/60		1.0	SC CH		CLAY; gray, moist, stiff, high plasticity, trace of silt and fine sand.
125					sc		CLAYEY SAND; tan, coarse to med. grained.
130	# 26	40/60		3.0 3.5	ML - CH		CLAYEY SILT/SILTY CLAY; clayey silt is mottled light and dark gray, dry, very stiff, low plasticity, silty clay is mottled brown and gray, moist to very stiff, medium to high plas.
135	1 27	0/60			GC		CLAYEY SANDY GRAVEL; gray and black, coarse and fine grained, subrounded and rounded, sand is coarse to medium grained, angular to subrounded.
F 133	# 28	48/60		1.0 - 3.5	CL		SILTY CLAY; dark deep gray, moist, stiff to very stiff, medium plasticty, laminated beds.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB28.DWG

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	~						BORING NO. GB#28
S LEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST S. Logan EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 260 feet DESCRIPTION COORDINATES N. 333,680.8 E. 1,549,926.3 E. 1,549,926.3 DATE BEGAN . 8/5/88 CROUND SURFACE EL. 30.4 ft.
-140	# 29	60/60		3.5 4.5	ML		CLAYET SILT; dark gray with cream spots, dry to slightly moist, very stiff to hard, low plasticity, blocky structure.
	#30	26/60		4.0- 4.5			
150-	# 31	52/60		2.0- 2.3			SILTY CLAY; dark gray and dark brown with creamy white patches and streaks, moist to very moist, stiff to very stiff, medium plasticity.
-155 -	# 32	40/60		2.5~ 2.6	CL		SILTY CLAY; dark deep gray, slightly moist to moist, very stiff, medium plasticity.
160	# 33	60/60		2.25			CLAYEY SILT; dark gray and dark brown, dry to slightly moist, very stiff, low to medium plasticity, laminated
-165	#34	8/60		2.30	ML SM-		structure (platey). SILTY CLAYEY SAND; black to tan, coarse to medium grained, subrounded to rounded.
-170 - 	#35	0/60	.		sc		CLAYEY SAND; small (inches thick) sandy clay beds interspersed in this interval.
175	# 36	52/60		1.25- 2.0	CH ML CH		SILTY CLAY; dark gray, dry, stiff, high plasticity, tr. fine sand CLAYEY SILT; gray and gray brown, moist, very stiff, low plast SILTY SANDY CLAY; brown with cream spots, moist, stiff, high plasticity.
	#37	0/60			CL.		SANDY CLAY, gray and brown, soft, medium to high plasticty sand is coarse and medium grained with some fine grained particles, loose. CLAYEY SAND; black and gray to tan, coarse to medium grained, some fine grained, angular to sub-
-185	#38	0/60			sc		rounded, some particle cementation.
190	# 39	0/60					SAND; black to gray, coarse to fine grained, subangular, to rounded, trace of fines and fine gravel.
195	#40	0/60			sw		GRAVELLY SAND; sand is all earthen colors and white, sub angular to rounded, coarse to very fine grained, gravel is fine grained, angular.
200	# 41	0/60			SP		SAND; mostly brown colors with some gray, subrounded and rounded, medium grained, trace of coarse and fine grained, trace of fine gravels.
205	#42	55/60		1.0- 1.6	CL		SILTY CLAY/GRAVELLY CLAY/SANDY CLAY; orangish brown and light gray to gray, moist to very moist, stiff, medium plasticity, sand is fine and very fine, gravel is coarse to fine, rounded.

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLJENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB28.DWG

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		1		Τ	Γ	Τ	DODING NO CD#28
CEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	BORING NO. GB#28 FIELD GEOLOGIST S. Logon EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 260 feet DESCRIPTION COORDINATES N. 333,840.8 E. 1.549,926.3 DATE BEGAN 8/5/88 DATE FINISHED 8/8/88 GROUND SURFACE EL. 30.4 ft.
-210 -	# 43	48 /60		3.6- 4.0			CLAYEY SILT; mottled light and dark gray and brown, dry, very stiff to hard, low to non-plastic, trace of medium grained sand, blocky stucture.
	3 44	54/60		3.3- 3.5			
-220	# 45	47/60		2.5- 4.5	ML		
-225	# 46	52/60		3.0- 2.5			
-235	#47	0/60			sc		CLAYEY SAND; light brown and grays, medium to fine grained, low plasticity, angular to subrounded.
-240	# 48	0/60					
	# 49	0/60			sw		SAND; black to brown, coarse to fine grained, subrounded to rounded, trace of fines, trace of fine gravels.
-245 ~ - ~ - ~ -250 ~	# 50	60/60		1.5-	CL-		SILTY CLAY/SANDY SILT; clay is dark gray with some lighter shades of gray, moist, stiff to very stiff, medium plasticity, silt is dark gray, dry, low plasticity, sand is fine to very fine, grained.
255	# 51	0/60					
	# 52	38/60		3. 25 - 3.75	ML		CLAYEY SILT; dark gray grading to mottled dark gray and dark brown with light gray streaks, moist, stiff to hard, low plasticity.
- 265 270							TOTAL DEPTH 260 FEET 4-1/2" diameter boring

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB28.DWG

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... Creating a Safer Tomorrow

	7				_	T-	DODING NO WAY A 1/D4
1	ËR				بر ا	1	BORING NO. $W14-1(B1)$
FEET	SAMPLE TYPE & NUMBER	₹		₹£.°	SYMBOL	ш	FIELD GEOLOGIST D. H. Cox
	Sk KP L	RECOVERY	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	5.	PROFILE	FOLIED BY J. Hadsoll DATE BEGAN 8/24/88
EP 44	PE SA	RE(_ 면 있 ()	SOSO	ا ق	CHECKED BY J. Hadsall DATE FINISHED 8/24/88
ō	🗠						TOTAL DEPTH <u>56.2 ft.</u> GROUND SURFACE EL. <u>30.3</u> DESCRIPTION
0 -			12 Christy box		 		CLAY/SILTY CLAY; dark gray, dry, stiff, non-plastic.
F 1	MD#1	9/18	8"x5' standplpe — top of casing —	6,9,12			Color varying from light gray to brown.
F 7	MD∦2	12/18		6,9,12	1		
L 5 1	MD∳3	12/18	4" sch. 40 steel	6,9,12	l		
<u> </u>			Bentonite/ cement grout		CL		
F_{in}			Cement grout				
107							CANDY CLAY, deal, gray, match and and and and all the
t 1							SANDY CLAY; dark gray, moist, soft, moderate plasticity, increasing sand with depth.
├ ┤							SANDY CLAYEY GRAVEL; gravel, medium coarse subangular
157					GC		rounded with sandy clay—clayey sand; dark gray, moist, stiff.
‡ ‡						1816	
<u> </u>					CL		CLAY/SILTY CLAY; dark gray—dark brown, soft to stiff, slightly to moderately plastic.
207					сн		slightly to moderately plastic. SILTY SANDY CLAY; dark gray, moist, soft, plastic.
‡ ‡							01 AV /01 +V 01 AV 1/2EF 1
£ , , , ,	ľ	- 1			CL		CLAY/SILTY CLAY; light to medium gray, moist, stiff, moderate plasticity.
F					CL		
FF	l					<i>(10)</i>	CLAYEY SANDY GRAVEL; medium to coarse, predominantly angular, composition — sandstones, siltstones, cherts, quartz,
30							clay; dark gray, wet, soft, slightly plastic.
F						S	
FF		ĺ			GC		
35	Į					16	
F 3	ł						
1			Bentonite pellets	Ī			SILTY SANDY CLAY; medium gray, moist, stiff, slightly plastic, interbedded silts and sands.
40			38.5 TO 41 ft.—		CL		
t 1			4" .010		-		SILTY CLAY; medium brown, moist, stiff, plastic.
F -		ł	S.S. screen from	 			CLAYEY GRAVELS; gravel, sand; clay, interbedded; pred.
45		ſ		ĺ			siltstones and sandstones, minor cherts and quartz, all
t 1			Centralizer ———	ĺ	GC	110	medium to coarse, subround to angular, sand; medium coarse, subangular to subround, moderate to well sorted.
F 1	1			ŀ			SILTY SANDY CLAY; gray brown, wet, soft to stiff, inter-
F ₅₀ -	1		#1C sand				bedded with clay and silty clay; gray brown, moist, soft—stiff,
1 1				-	CL		plastic.
┠┪		ł	Bentonite				CLAY/SILTY CLAY; gray brown, moist, stiff, moderate
55			backfill -				plasticity.
t ‡						7777.	TOTAL DEPTH 56.2 FEET
Ŀź			9.6"	_	i		10 Mg DEI 111 30,2 TEET
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SAMPLING METHODS: MD=California Modified

S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



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						· ·	BORING NO. W14-2(A)
1 5	E.		·		7		` '
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		8્લું	USCS SYMBOL	<u> </u>	FIELD GEOLOGIST D. H. Cox COORDINATES N.333.682.5
2	7 Z	S ≤	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	Σ	PROFILE	EDITED BY J. Hadsall DATE BEGAN 7/29/88
H di	ω H PH A	REC (9. S. P.	SCS	ā	CHECKED BY J. Hgdsgil DATE FINISHED 8/1/88 FOTAL DEPTH 28.0 ft. GROUND SURFACE EL. 30.5
";	Σ						
- 0 -			12" Christy box		-		DESCRIPTION CLAY/SILT/ CLAY; medium dark gray, dry, stiff, slightly
F 4	MD#1	9/18	8"x5" standpipe — — top of casing	9 ,9,15			plastic
t i	 MD#2	9/18	4° sch. 40 steel	7,12,20	CL		
- 5 -	MD#3	10/18	casing	4,8,13			
	MD#4	18/18	Bentonite/	ND			
t :		10,10	cement grout				CLAY/SILTY CLAY; medium gray green, moist, soft, plastic.
- 10 -	s	60/60	Bentonite pellets		CH-		
					CL		8−13−88 GCLAY/SILTY CLAY; medium dark gray, predominantly dry,
t i			4" .010 S.S. screen from				stiff, slightly plastic.
- 15 -	s	48/48	15 to 75 ft		CL		SANDY CLAY; gray green, wet, soft, plastic, sticky, very fine sand.
	Š	15755	Centrolizer		ł		CLAVEY SAND madium deet gray wat fine to madium
t :	5	12/12 12/12			SC		CLAYEY SAND; medium dark gray, wet, fine to medium. GRAVELLY SAND; dark gray black, medium coarse, w/pebbles
-20-							CLA?; medium dark gray, stiff, plastic. SANDY CLAY; dark gray, wet, soft, non-plastic, silty, fine
L 1	s	60,/60			CH.		grained.
† †			Centralizer				
7.5							CLA7; medium dark gray, moist, stiff, plastic, organic material.
1 1	S	48,/48	#1C sandBentonite backfill		ОН		
Ŀ			411 111		-	2333	TOTAL DEPTH 28.0 FEET
30			12"	—			
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SAMPUNG METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: W14-2A.DWG

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1.	· ~	l	}	l	1	1	BORING NO. $W14-3(A)$
FEET	SAMPLE TYPE & NUMBER	>] _~ ~	ቪ		` '
고	빌	RECOVERY (in.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6)	SYMBOL	ROFILE	FIELD GEOLOGIST J. Hodeali COORDINATES N. 333,561.9
	SAMPLI	8₹	MELE SOMMAN	P. A. S. S. S. S. S. S. S. S. S. S. S. S. S.		õ	EDITED BY D. H. Cox DATE BEGAN 7/20/88
다 는	ŊΨ	, A		໘ ລຸ	nscs	a.	CHECKED BY J. Hadeall DATE FINISHED 7/20/88
,	۲	j		1		İ	TOTAL DEPTH 35 feet GROUND SURFACE EL. 31.7 ft.
-0-	 		12" Christy box		=		Asphalt DESCRIPTION
	MD#1	9/18	8"x5" standpipe — 🕶 🗍	6,6,10	GM		Asphalt SILTY SANDY GRAVEL; dark brown, moist, medium dense.
} -	140.42	10/10	top of casing	5,10,12	1		SILTY CLAY; dark brown, dry, very stiff, low plasticity.
5 -	MD#2	18/18	4" sch. 40 steel		ļ		
 ~	MD#4	9/18	casing ————————————————————————————————————	5,9,12	(
t i	MD#3	10/18	Bentonite/	4,9,11	ł		
F 7	s	30/30	cement grout	1	CL		
- 10 -					l		Grades to a sandy clay with depth, moisture also increases.
F 3		/	Bentonite pellets		ľ		, . , ,
1 1	S	60/60	12 to 13.1 ft.				
15			screen from				∇
	MD#5	15/18	15 to 30 ft	4,8,9			-SILTY SAND; dark brown, saturated, medium dense, fine argined.
	s	42/42					g, diribd.
1 4	3	72/72					
20-					SM		
$\mathbf{F} = \mathbf{F}$	s	60/60					Crades to SAND, deel, and, actuated another deep
}	3	60/ 60			1		Grades to SAND; dark gray, saturated, medium dense, very fine grained.
25					L		
F +					CL		SANDY SILTY CLAY; dark gray, very molet, low plaeticity.
F 7	s	60/60			SM		SILTY SAND; dark gray, saturated, medium dense, very fine
h +							grained. SANDY SILTY CLAY; dark gray, very moist, low plasticity.
30							entitle service dark gray, very more, for planticity.
F 4	s	60/60	#IC sand ———		CL		
t 1	, , l	00/00	Bentonite				SILTY CLAY; medium brown, moist, stiff, low to medium plasticity.
- 35			backfill]		7777	<u> </u>
t 1		1	12"	_			TOTAL DEPTH 35 FEET
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

			,			,	
JEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER 6")	USCS SYMBOL	PROFILE	BORING NO. W14-4(A) FIELD GEOLOGIST W. Hopkins FINITE BY J. Hadsall DATE BEGAN 7/28/88 CHECKED BY J. Hadsall DATE FINISHED 7/28/88 TOTAL DEPTH 28.0 feet GROUND SURFACE EL. 29.5 ft.
- 1			12 Christy box	-	-	HH	DESCRIPTION CLAYEY SAND; medium brown, moist, medium dense, non-
L 1	MD#1	6/18	8"x5' standpipe —	10,5,8	20		plastic.
┡╶┪	MD#2	12/18	top of casing	5,7,12	<u>-</u>		SILTY CLAY; medium gray, moist, stiff, moderate plasticity.
L ₅ =			4" sch. 40 steel				
\mathbf{F}	MD#3	15/18		7,7,10			SILTY CLAY; medium brown, maist to wet, stiff, moderate
F 7	MD#4	9/18	Bentonite/ coment grout —	6,6,9	CL		plasticity.
10	s	60/60	Bentonite pellets				▼ SILTY CLAr; medium brownish gray, wet, soft to medium ? stiff, moderate plasticity.
\mathbf{f}			1.7 (0 15.5 16.				CLAYEY SILT; medium grayish brown, wet, soft, low plastitcy.
F157	s	38/60	4" .010 S.S. screen from		ML		
t 1	٦	30,00	16 to 21 ft		SP	mm,	SAND; grayish brown, wet, loose, medium to coarse grained.
F 7			Centralizer				SANDY GRAVEL; red to gray and black, wet(saturated), loose.
L 201					GP		Same and the gray and bloom, management of
F ^ -	s	60/60				111	SILT? CLAY; medium to dark gray, moist to wet, stiff,
t 1					CL		moderate plasticity.
FF			#IC sand Bentonite		ML	$\overline{\mathbb{W}}$	CLAYEY SILT; medium gray, wet, soft, low plasticity. SANDY SILTY CLAY; medium to dark gray, moist to wet,
F , , 1	s	60, 60	DOCKTIII		CL-		stiff, randerate to high plasticity.
} -					СН		
F 7	-						TOTAL DEPTH 28 FEET
-30-			12"	-			
FF							
Ьd	ł						
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t d			[l
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



...Creating a Safer Tomorrow

					T	T	DODING NO THE ECON
L	l _{ex}				١.		BORING NO. $W14-5(B1)$
FEET	9	≿		z α Ω	<u>8</u>		FIELD GEOLOGIST E. Wessner E.1,549,900.6
7	SAMPLE	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6°)	SYMBOL	PROFILE	
ੜ	¥ ¥ ¥ ¥) EC	į.	15 X 15	SCS	æ	EDITED BY J. Hadsall DATE BEGAN_8/11/88 CHECKED BY B. Manchon DATE FINISHED_8/12/88
G.	YPE S	œ		a))SC	1	TOTAL DEPTH 58.7 ft. GROUND SURFACE EL. 31.6 ft.
							DESCRIPTION
			12" Christy box		FILL		FILL: silty sandy clay; gray brown, dry, non-plastic, some
┠╶	MD#1	6/18	8"x5' standpipe — top of casing —	5,4,5	-	1111	gravel. SILTY CLAY; dark gray, slightly moist, stiff, moderate
ļ .	MD#2	12/18		4,7,8	CL		plasticity.
- 5 -	MD#3	12/18		6,7,9	-		SILTY CLAY; light tan, slightly moist, stiff, slightly plastic.
	MUPS	12/10	4" sch. 40 steel ्र 🔀] °.,,,•	SC		CLAYEY SAND; medium grained, angular, poorly sorted.
1			casing		ļ		SILTY CLAY; brown, moist, soft, plastic, with thin coarse sand interbeds.
-10-			Bentonite/ cement grout		ļ		SANDY COANSILY CLAY A A B COALA COALA COALA
-			Cameric grout		CL.		SANDY GRAVELLY CLAY; dark brown, moist, soft, moderate plasticity, coarse sand to fine gravels.
$\mathbf{F} = \mathbf{F}$				ľ			•
L					l		
F . 3					GW	60	GRAVEL; dark gray, fine to coarse, angular, poorly sorted. Produces water.
t i				,			SANDY CLAY; brown, moist, soft, slightly to moderately
F -}							plastic. SILTY CLAY; brown to dark gray, moderately moist, soft,
20 -							plastic, sticky, stringers of coarse sands.
\mathbf{F}							
lt d							
- 25 -		·		l i	ļ ,		
t 1					CL		
1 1]]			SILTY CLAY; gray, wet, very soft, slightly plastic, very sticky,
30				ŀ			some coarse sand stringers.
F 74		ł					
t i	- 1	ł	[,] [,]				
I -		i					SILTY CLAY; dark brown gray, moist to moderately moist, medium stiff, moderately plastic, stringers of coarse sand.
- 35 -				l	SC		SAND; black tan, angular, poorly sorted, coarse, clays present
F 4	ĺ	1					SILTY CLAY; gray and orangish brown, moist, soft, moderate plasticity, inclusions of medium grains, thin interbeds of
t 1							coarse sands, poorly sorted.
40-	1	Į	Bentonite pellets	j	CL		
1 1			40.5 to 42.8 ft.—		-		
1		ļ	4" .010 S.S.				S!LTY CLAY; gray and orange brown, moist, soft, very plastic.
-45	ŀ	1	screen from 44.9 to 49.9 ft.————————————————————————————————————			m	CDAVEL block and the F
1						30	GRAVEL; black and tan, fine to very coarse, angular, poorly sorted, grading to a fine—coarse sand; very clean.
F]	J		Centralizer —		GW	ŠŠ	Produces water.
F., +				- 1		క్రిద్ద	
L 201			MC and	Ī			SANDY CLAY/SILTY CLAY; gray, molst, soft, moderate to
E 1	ļ		#1C sand	- 1			very plastic.
F 1	l		Bentonite (2, 12, 1		_,		
- 55 -			backfill—		CL		
t 1	- 1	-	110 110				
t t			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				
60		.]		Į.			TOTAL DEPTH 58.7 FEET
t 1	ł	1	9.6"				(
F 7		1			ļ		!
65	ł	ł		- 1	ł	- 1	ł
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



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SAMPLE SE & NUMBER RECOVERY (IN.) RECOVERY (IN.) ANAMPLER SAMPLER (PER 6°) SCS SYMBOL PROFILE	BORING NO. $W14-6(B1)$
ER COMB	
	COORDINATES N 333,732.7 . FIELD GEOLOGIST D. H. Cox
SAMPLE E & NUM (IN) MECCOVERY (IN) MECCOVERY SAMPLER SAMPLER CS SYNGE CS SYNGE CS SYNGE PROFILE	FIELD GEOLOGIST <u>D. H. Cox</u> EDITED BY J. Hadsoli <u>DATE BEGAN 8/25/88</u>
SAM SAM SAM SAM SAM SAM SAM SAM SAM SAM	CHECKED BY J. Hadsall DATE FINISHED 8/26/88
# 8	TOTAL DEPTH 56.3 feet GROUND SURFACE EL. 29.6 ft.
0	DESCRIPTION CLAY/SILTY CLAY; light to medium gray, moist, stiff, plastic.
12" Christy box - 3,6,9 CH	CLAT/SILTY CLAT; light to medium gray, moist, stiff, plastic.
	CLAY/SILTY CLAY; light to medium gray brown, moist,
MD#2 10/18 top of cosing 5,10,15	moderate plasticity.
_ MD#3 12/18	
	GRAVELLY SILTY CLAY; dark gray brown, moist, stiff,
4" sch. 40 steel	moderately plastic.
casing	
Bentonite/cement grout	CLAYEY SANDY GRAVEL; medium to coarse, subround to
15 - GC	angular, with cherts, and milky quartz mixed with sand; fine to coarse, subangular to subround, moderate to poorly
	sorted and interbedded with clay; light to medium gray, wet, soft, slightly plastic. Product in cuttings; produces water.
20 - so	CLATEY SAND; fine to medium, subangular to subround, medium sorted quartz, with clay; brown to gray, moist, soft,
	moderate plasticity. SANDY SILTY CLAY; dark gray, wet, soft, slightly to non-
	plastic.
-25-	SILTY CLAY; medium gray brown, moist, soft, slightly to
	moderately plastic.
307	
	SANDY CLAYEY GRAVEL; medium coarse, subround to angular, poorly sorted, with sand; fine to coarse, subangular to
	subround, moderately to poorly sorted, with clay; dark brown, moist, stiff. Produces water
35	SANDY CLAY; coarse, angular, poorly sorted.
cL	SILTY CLA'r; green gray and green brown, moist to wet,
	soft.
Bentonite pellets 38.9 to 41.2 ft.	CLASE: SAND; fine to coarse, subangular to subround, inoderately to poorly sorted quartz with Interbedded clay;
	green gray, maist to wet, soft, slightly plastic. CLAY/SILTY CLAY; dark gray, maist, stiff, plastic.
Centralizer	CLATEY SAND; medium coarse, subangular to subround,
	moderately to well sorted.
4° .010 S.S.	CLAYEY SANDY GRAVEL; coarse, predominantly angular mixed with sand; medium to coarse, subangular to subround,
screen from	moderately sorted quartz, and clay; medium dark gray, wet,
45.2 to 53.2 ft GC	slightly molst.
[50]	Produces water.
Controlizer-	}
#IC send	CLAY/SILTY CLAY; medium gray, moist, soft, moderately
backfill CL	plastic.
	TOTAL DEPTH 56.3 FEET
9.6"	
F60-	
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SAMPLING METHODS: MD=California Modified

S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

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...Creating a Safer Tomorrow

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1-	eg.			ļ] _		BORING NO. SB14-1
FEE '	š	₩ ~		8 % C	g B B	Щ	COORDINATES N 333,559.7 - FIELD GEOLOGIST W. Hopkins
Z	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	JSCS SYMBOL	PROFILE	FIELD GEOLOGIST W. Hopkins EDITED BY J. Hodsoll DATE BEGAN 8/8/88
HLIGHT	γ γ γ	REC (JB & g	SCS	ă.	CHECKED BY J. Hadsall DATE FINISHED 8/8/88
(.) (d)	≿				رة		TOTAL DEPTH 15 feet GROUND SURFACE EL. 30.97 ft.
-0-				ļ		1,17,	DESCRIPTION SILTY CLAY: medium dark brown, moist, stiff, moderate
t 7	MD#1	8/18		8,10,7			plasticity.
	MD#2	9/18		4,8,16	OL		
5 -	==	==		<u> </u>	<u> </u>		SILTY CLAY; gray-green-orange-brown, moist, stiff,
t o	MD#3	12/18		4,7,13			moderate plasticity.
-	s	42/42	,	1	CL-		SANDY CLAY; greenish gray, moist, stiff, moderate to high plasticity.
100					СН		SANDY SILTY CLAY; greenish gray, moist, stiff, low plasticity.
<u> </u>							SANDT SICT CERT, greenish gray, moist, still, low plasticity.
-	S	60/60			SM-		CLAYEY SILTY SAND; gray brown, wet, medium dense, low
15-					sc		plasticty.
<u>t</u> :				l			TOTAL DEPTH 15 FEET 8' diameter boring
F 7							
20]			
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: **.DWG

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...Creating a Safer Tomorrow

_	1			ī	_	ī	DODING NO CD14 9
	Ĕ				ہ ا	ĺ	BORING NO. SB14-2
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		BLOWS ON SAMPLER (PER 6°)	USCS SYMBOL	y	FIELD GEOLOGIST W. Hopkins COORDINATES N 333,605.7
DEPTH IN	3 4	o zi	WELL SUMMARY	S P S	SS	PROFILE	EDITED BY J. Hadsall DATE BEGAN 8/8/88
EPT	Ny Ma	RE (ब ∾ ,	SC	4	CHECKED BY J. Hadsall DATE FINISHED 8/8/88 TOTAL DEPTH 15 feet GROUND SURFACE EL. 30.67 ft.
	-						DESCRIPTION
-0:					SW	777	GRAVELLY SAND; light brown, dry. SILTY CLAY; medium gray, moist, stiff, low to moderate
t :	MD#1	ND		6,6,9			plasticity.
	MD#2	ND		8,6,13			
- 5 -	MD#3	ND		3,6,10	1		
! :	MD#4	ND		7,10,13	CL		
F.,:	s	ND	1				SILTY CLAY; medium gray, with brown and light gray spots, moist to wet, stiff, low plasticity, pebbly.
10-							SANDY SILTY CLAY; light gray, wet, medium stiff, low plasticity.
ļ: :	s	ND			<u> </u>		
٠					SM		CLAYEY SILTY SAND; light gray brown, wet, loose, low plasticty.
15 -							TOTAL DEPTH 15 FEET
1:							8° diameter boring
20							
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB14-2(MF21)

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...Creating a Safer Tomorrow

								BORING NO. SB14-3
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMAR	Y	BLOWS ON SAMPLER (PER 6°)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST W. Hopkins EDITED BY J. Hadsall CHECKED BY J. Hadsall TOTAL DEPTH 15 feet COORDINATES N. 333,691.7 E 1.549,917.6 DATE BEGAN 8/10/88 DATE FINISHED 8/10/88 GROUND SURFACE EL. 30.3 ft.
0 1						FILL		FILL: clayey silty sand; orange brown, moist, loose, low
t i	MD∦1	8/18			13,5,14	OL		plasticity. SILTY CLAY; dark brown, moist, stiff, moderate plasticity.
- -	MD#2	9/18			6,7,14			SILTY CLAY; medium gray brown, moist, stiff, low to moderate plasticity.
5 -	MD#3	11/18			5,12,16	CL		SILTY CLAÝ; mediúm gray with brown and white spots, moist, stiff, low plasticity.
F 7	S	42/42						
10-		i			i	ML		CLAYEY SILT; medium to light gray, wet, soft, loose, low
	s	60/60			!	SM		CLAYEY SILT; medium to light gray, wet, soft, loose, low plasticity. SILTY SAND; dark gray, wet, loose, low plasticity. CLAYEY SILT; medium gray, wet, soft, low plasticity. SILTY CLAY; medium gray with brown spots, wet, stiff, low
15 -	- "						7777	to moderate plasticity. TOTAL DEPTH 15 FEET
F 7				l				8 diameter boring
20			ł	- 1				
F 7			į	1				
F -			İ					
25			ĺ	l				
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB14-3(MF21)

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APPENDIX I

SECTION 19.0 - SITE 19 BORING LOGS

DECEMBER 1988 QUARTERLY REPORT REMEDIAL INVESTIGATION/FEASIBILITY STUDY

DATED 15 DECEMBER 1988

		Г		T T	Γ		BORING NO. GB#29
FEET	SAMPLE TYPE & NUMBER	_		 ~≿~	ğ		• •
17	NUM.	RECOVERY	WELL SUMMARY	MEASURED CONSISTENCY	SYMBOL	PROFILE	FIELD GEOLOGIST D. H. Cox COORDINATES N. 338.113.9 E 1,552,447.9
	SAMPLE E & NUI	ECC		AEAS NASIS	USCS 3	PRO	FDITED BY J. Hodsall DATE BEGAN_8/10/88 DATE FINISHED_8/12/88
ЭЕРТН] ~		787)S		TOTAL DEPTH 250 feet GROUND SURFACE EL. 9.7 ft.
- 0 -		ļ		<u> </u>	_		DESCRIPTION DESCRIPTION
t :							Asphalt. FILL: silty sandy gravel; dark brown, slightly moist, soft, gravels
<u> </u>	#1	0/60			FILL		and sands are poorly sorted.
- 5 -		 				200	CLAYEY SANDY GRAVEL; dark gray, coarse, angular,
	#2	0/60					moderately to poorly sorted.
1 1	<i>y</i> ~	","					
10		 					Gravel as above with silt and sand.
1 1	#3	0/60					ĺ
F_{-}					GC		
F 15		i					
1 1	#4	0/60					
227		l	İ				
F 3							GRAVEL; dark brown, hard, coarse, angular to rounded, with
$\mathbf{F} = \mathbf{F}$	# 5	0/60					clay, gray brown, wet, soft.
25			•				SILTY CLAY; gray brown, moist, soft, plastic, pebbles.
F 1	#6	24/60					
L 1	#O	24/60		1.5			
30							
F +	#7	0/60					
F_{-}			,				
F ** ‡							SILTY CLAY; medium brown, moist, very stiff, slightly plastic, minor sand.
F 7	#8	38/60		2.5-			signary prestor, minor serie.
40 1	~=			3.5			
E d				1.5-			SILTY CLAY; medium brown to gray brown, dry, very stiff, slightly to non-plastic.
Ŀэ	#9	41/60		3.0-			
-15				3.5			i
F 7	# 10	0/60			CL		
F 1	.	,,,,,					
50			1	ŀ			
t d	#11	0/60					1
 	- 1	1					
-55+ 							SANDY CLAY; green brown, moist, very stiff, slightly plastic, associated coarse sand and minor gravel.
F 1	#12	13/60		2.5- 1.5	•		The state of the same same same same same same same sam
60							
<u> </u>	J]		2.5-			
F -	#13	38/60		3.0-			
65				3.0			SILTY CLAY; medium brown – gray brown, dry, very
1	[3.0-			stiff, slightly to non-plastic.
է վ	#14	55/60		2.5- 3.0			į
L-ol				5.0	8		

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: ME-GB29.DWG

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-	eκ						BORING NO. GB#29
DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	MEASURED CONSISTENCY (TSF)	USCS SYMBOL	PROFILE	FIELD GEOLOGIST D. H. Cox EDITED BY J. Hadsall DATE BEGAN 8/10/88 CHECKED BY J. Hadsall DATE FINISHED 8/12/88 TOTAL DEPTH 250 feet GROUND SURFACE EL. 9.7 ft. DESCRIPTION
70 -	# 15	11/60		1.0			SILTY CLAY; medium brown minor gray, molst, soft, plastic, minor fine sand.
80	# 16	0/60					
	# 17	0/60			7		
85	# 18	0/60			CL- CH		
95	# 19	0/60					
199	# 20	0/60					SILTY CLAY; medium brown, wet, soft, plastic, minor coarse,
125	# 21	23/60					angular, gravel fragments.
- 1 - 1 - 1	# 22	0/60					
115	# 23	0/60					
120	# 24	0/60			CL		SILTY CLAY; medium brown — gray brown, moist, stiff,
-125	/25	31/60		1.0			slightly to moderately plastic. SANDY CLAY; brown gray, moist, stiff, slightly plastic. SILTY CLAY; blue gray, moist, very stiff, slightly
130	# 26	60/60		3.0 <i></i> 4.0			plastic, grades to brown gray.
-135	#27	24/60		2.5- 2.0			
	# 28	52/60		2.5			

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 2 OF 4



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							BORING NO. GB#29
Li Li	JER	ł :		_}	占		
FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)		MEASURED CONSISTENCY (TSF)	SYMBOL	щ	FIELD GEOLOGIST D. H. Cox. COORDINATES N. 338.113.9 E. 1.552,447.9
z ·	SAMPLE E & NU	οğ	WELL SUMMARY	ASU SIST	is is	PROFILE	EDITED BY J. Hadsall DATE BEGAN 8/10/88
EP TH	ું મ	RE)		≥ S ×	nscs	a.	CHECKED BY <u>J. Hodgoll</u> DATE FINISHED <u>\$/12/88</u> TOTAL DEPTH <u>250 feet</u> GROUND SURFACE EL. <u>9.7 ft</u> ,
õ							
-140 -			T		_	1111	DESCRIPTION SILTY CLAY; gray brown, moist, very stiff to hard, slightly
FF	# 29	57/60		3.0-			to non-plastic.
1 1	,	,		4.0			
-145 -				<u> </u>			CLAY; bluegray, predominantly dry, very stiff to hard, slightly
F	# 30	60/60		4.0~	CL		plastic.
1 1	•00	00,00		3.5			
-150 -		 					
F 7	# 31	50/60		3.0-			
1 1	P 31	30/00		4.0	l		
-155 -			1	1			CLAYEY SILT; gray brown, dry, hard, non-plastic, trace
F 7	#32	55/60		4.0	ML		fossil fragments.
1 1	#22	33,00	1	1 4.0		ЩЩ	THE VALUE COLUMN TO THE TANK THE PARTY.
-160-				}			SANDY CLAY; medium brown, moist, soft, non-plastic.
F 7	#33	0/60		1 1			
t 1	# 33	0,00					
-165-							SILTY CLAY; gay—green, moist, very stiff to hard, slightly
F 7	# 34	60/60	·	2.0-			plastic.
t 1	#54	00,00		4.0			
-170-							
F 7	#3 5	57/60		3.5-			
L 1	#33	37/60		3.0			
-175			ļ				CLAY; medium to dark gray, predominantly dry, very stiff,
FI	/ 36	45/60		3.0-			non to slightly plastic.
t 1	# 50	43/00		2.0			
180				1			•
FF	#37	0/60		1 1			
1 1	# 3.	0,00	,	1 1	-		CRAVELLY CANDY OLAY, modition, and models were stiff
185			1		CL		GRAVELLY SANDY CLAY; medium gray, moist, very stiff, non-plastic.
FF	#38	34/60	l	2.5-			SILTY CLAY; gray—brown, moist to dry, stiff, slightly plastic.
t 1	,,,,,,	- / 30		3.5			i
130				 			SILTY CLAY; gray, minor brown-gray, prdominantly dry, stiff
F 7	#39	60/60	1	4.5			to hard, slightly to non-plastic.
t 1	#33	30,00		3.0			
195				 			SANDY CLAY; mottled gray brown, predominantly dry, very
FF	# 40	48/60	1	2.5-			stiff — hard, slightly to non-plastic.
t 1	, 10	.0,00	. 1	4.5			1
-200			(SILTY CLAY; light to medium gray, dry, hard, non-plastic.
F 1	#41	58/60			į		
t 1	*7'	30/00		4.5			ì
205							SILTY CLAY; dark gray, dry, hard, non-plastic.
F 1	,,,	22 /en	-	4.0-			
Ŀј	# 42	22/60	1	4.5			
E2101		1				1117	

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: MF-GB29.DWG

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...Creating a Safer Tomorrow

		1					BORING NO. GB#29
S DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WEILL SUMMARY	MEASURED CONSISTENCY TSF)	USCS SYMBOL	PROFILE	COORDINATES N.338.113.9 — E1.552.447.9 EPHED GEOLOGIST D. H. Cox EPHED BY J. Hadsall DATE BEGAN 8/10/88 CHECKED BY J. Hadsall DATE FINISHED 8/12/88 TOTAL DEPTH 250 feet GROUND SURFACE EL. 9.7 ft.
210 -	#43	0/60					SILTY CLAY; green gray to brown, dry to moist, stiff, non to slightly plastic.
220	#44	0/60					
225	# 45	0/60					
	#46	25/60		4.5 2.5	CL		
230	#47	59/60		3.0	OL.		SILTY CLAY; brown gray, predominantly dry, stiff, non to slightly plastic.
	#48	60/60		3.0 2.5			
240	# 49	60/60		4.5- 4.0			SILTY CLAY; light to medium gray, dry, very stiff, non-plastic.
-245	#50	50/60		4.5- 2.5			SILTY CLAY; medium gray, dry, very stiff—hard, non—plastic.
-255 -260 -265 -270							TOTAL DEPTH 250 FEET 4-1/2 diameter boring

SAMPLER: 5' Core Barrel Wireline Sampler

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

PAGE 4 OF 4

...Creating a Safer Tomorrow

							
1.	æ]				BORING NO. $W19-1(A)$
FEET	MPLE & NUMBER	≿		z ~ ^	SYMBOL		COORDINATES N. 338,105.4
Ž.	SAMPLE E & NUN	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	3	PROFILE	FIELD GEOLOGIST J. Hadsall COORDINATES N. 338,105.4 E. 1.552,444.2
ž	A 45.	0 ×	Wella Bolling Will	PER PER PER		Ş.	EDITED BY J. Hadsall DATE BEGAN 7/26/88
ЭЕР ТН	χ. 1γPΕ	₩		= " -	nscs] "	CHECKED BY J. Hadsall DATE FINISHED 7/27/88 TOTAL DEPTH 40 feet GROUND SURFACE EL. 9.78 ft.
ن	F				~	1	
F 0 -	_		12" Christy box				DESCRIPTION SILTY SAND: moderate brown, moist, medium dense, with
	MD#1	9/18	8"x5' standpipe —	4,10,15			subrounded gravel (15%).
ŀ →	MD#2	9/18	top of casing	8,7,8	SM	M	
5 -	MU92	3/10		0,7,8			
- -	MD#3	12/18	4" sch. 40 steel	3,6,10			CLAY; olive black, slightly moist, stiff, moderate plasticity
	MD#4	12/18		6,8,11	CL		
-	s	24/24	Bentonite/ cement grout				SILTY CLAY; light brown, moist, soft, plastic.
L10]							Sierr Sear, light brown, moist, soit, plastic.
\mathbf{F}	s	60/60					SANDY SILTY CLAY; fight brown, moist, soft, plastic, pebbles throughout, moisture increasing with depth.
t i	3	60/60	[throughout, moisture increasing with depth.
1.5		L -					$ar{oldsymbol{ar{z}}}$
H +		·					-
[]	s	60/60					
┢┪					CL		SILTY CLAY; light brown, moist, medium stiff, moderate
F 29 d			[4] [4]		٥.		plastic.
F 7	_	50 (50	l li ki				
ŀ 1	S	60/60	A A				
25			Bentonite pellets				
F 4			25.8 to 27.4 ft.				
t 1	s	60/60					
F 4			4" .010 S.S. screen from				Sand content increases (10%)
-30-		├ ─- ┤	30 to 35 ft.			77777	Sand content increases (10%). SAND; medium brown, wet, medium dense, well sorted,
F]	_						subrounded sand.
F 1	S	24/60	Centralizer ———		SW		
135				l			
- -			#1C sand		CL		SILTY CLAY; medium brown, moist, medium stiff, moderate plasticity.
	s	60,/60	Bentonite backfill		GM		SILTY SANDY GRAVEL; wet, loose.
F 4	i		14.114	ŀ	CL		SILTY CLAY; medium brown, moist, med. stiff, mod. plasticity
101		· 				77.77	TOTAL DEFITH 40 FEET
F 7		ł					TOTAL BEFORE AN PERT
F +	[[- - 12"	-			
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

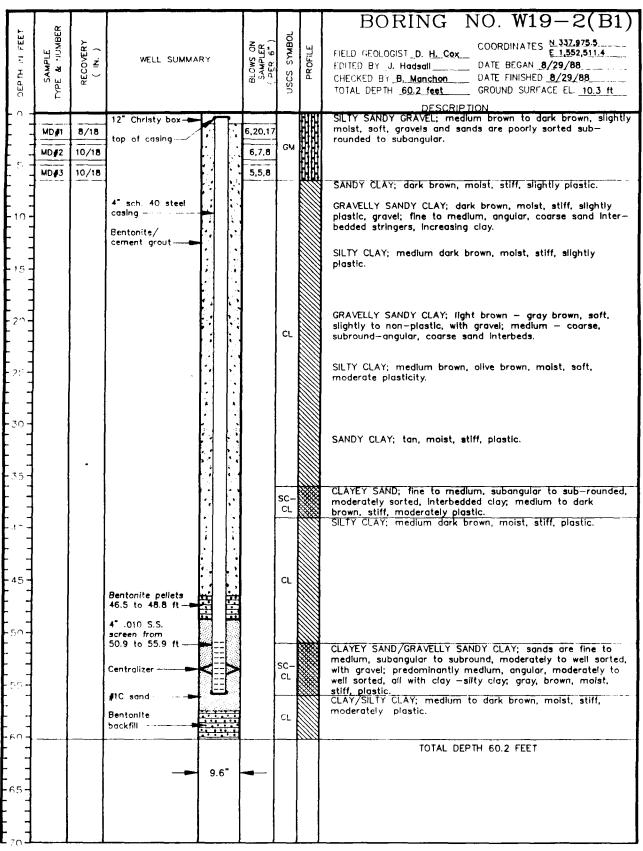
CLIENT: Moffett Naval Air Station Moffett Field, California

...Creating a Safer Tomorrow

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FUE: W19-1A.DWG



SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



... Creating a Safer Tomorrow

BORING NO. W19—3(B1) WILL SIMMARY WILL SAMP WILL SIMM MICH SORT MICH SIMMARY WILL SIMMARY WILL SIMMARY WILL SIMMARY WILL SIMMARY WILL SIMMARY WILL SIMMARY WILL S								
## WILL SIMMARY ## WILL SIMMAR		~						BORING NO. W19-3(B1)
12 Christy box 12 Chr	Щ	BE.				占		
12 Christy box 12 Chr	12	ω. C.V.E.	. FR		요류.	Ϋ́Θ	Ш	COORDINATES N 338,304,3 E 1,552,227,1
12 Christy box 12 Chr	1	뒫	δż	WELL SUMMARY	8 ¥ €	37	P.	FDITED BY J. Hadsall DATE BEGAN 8/31/88
12 Christy box 12 Christ	Ŧ		EC		SAU	SS	g.	
DRAYELLY SANDY CLAY seems vet, soft, non-plastic, interhedded with coarse angular gravels and coarse, angular gravels with medium coarse, authority comment grout 15	Ë	, e	œ			Š	1 1	
Mg/I 9/18 to por raning— WD/2 12/18 to por rani	1 '	<u> </u>				l	l i	
Moff 8,18 Moff 12	-0-			10" Christy have		<u> </u>	ill.	GRAVELLY SANDY CLAY: brown wet soft non-plastic
Moy2 12,18 Moy3 12,18 Moy3 12,18 Moy3 12,18 Moy3 12,18 A* sch. 40 steel casing— Beatonite/ cement grout— CL SSLTY CLAY; dark gray, moist, stiff, plastic with minor sand; fine to medium, and gravel, medium coarse, angular moderate plasticity. GRAVELLY SANDY CLAY; brown, moist, stiff, plastic. SSLTY CLAY; medium brown, moist, stiff, plastic. CLATY SAND: predominantly medium, subangular to submounted plasticity, with interbedded growls (minor); medium coarse, angular moderate plasticity. SSLTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded growls (minor); medium coarse, angular moderate plasticity, with interbedded growls (minor); medium coarse, angular moderate plasticity, with interbedded growls (minor); medium coarse, angular moderate plasticity, with interbedded growls (minor); medium coarse, angular moderate plasticity, with interbedded growls (minor); medium coarse, angular moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. GRAVELLY SANDY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY (LAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY (LAY; gray-brown, moist, stiff, moderate plasticity.	} -	NAD #1	9 /19	12 Criristy Box	12 10 6	l		interbedded with coarse angular gravel with medium coarse,
SANDY CLAY, dark gray, moist, stiff, plastic with minor sand; fine to medium, and gravel, medium coarse, angular such as the sand; fine to medium, and gravel, medium coarse, angular sand; fine to medium, and gravel, medium coarse, angular sand; fine to medium and gravel, medium coarse, angular sand; fine to medium and gravel, medium coarse, angular sand; fine to medium and gravel, medium coarse, angular sand; fine to medium and gravel, medium coarse, angular sand; fine to medium and gravel, medium coarse, angular sand; fine to medium and gravel sand; fine to medium and gravels with medium coarse angular gravels with medium coarse sand. SELTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor), medium coarse, angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray-brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. CLAY/SELTY SANDY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SELTY SANDY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SELTY SANDY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SELTY SANDY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SELTY SANDY CLAY; gray-brown, moist, stiff, moderate plasticity.	† -	MD#1	0/10	top of casing—	12,10,0			
SILTY CLAY; medium dark gray-brown, moist, stiff, plastic. SILTY CLAY; medium dark gray-brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. CLAYEY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. Chritolium - 4: 0.11 S.5 screen from 51 to 56 ft. Centralium - 4: 0.11 S.5 screen from 51 to 56 ft. Charliam - 4: 0.11 S.5 screen from 51 to 56 ft. Charliam - 4: 0.11 S.5 screen from 51 to 56 ft. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.		MD#2	12/18		6,5,5			CAMPAY OLD AND A STANK A STANK
SILTY CLAY; medium dark gray-brown, moist, stiff, plastic with minor sand; fine to medium, and gravel, medium coarse, angular sand; fine to medium, and gravel, medium coarse, angular sand; fine to medium, and gravel, medium coarse, angular sand; fine to medium, and gravel, medium coarse, angular sand; fine to medium brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. CLATY SAND; predominantly redurm, subonquiar to sub-round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, suboround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subongular to subround, moderately to well sorted. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.	- 5 -							SANUT CLAT; dark gray, moist, stiff, slightly plastic.
4" sch. 40 steel cosing — CL Bentonite/ cement grout — SILTY CLAY; medium dark gray-brown, moist, very stiff, moderate plasticity. GRAVELLY SANDY CLAY; brown, moist, stiff, plastic. CLAY; medium brown, moist, stiff, plastic. CLAY; medium brown, moist, stiff, plastic. CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sarted. Centraliver — CLAY; stiff (LAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subangular to subround, moderately to well sarted. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.	├ -	MD#3	12/18		5,8,13			
SILTY CLAY; medium dark gray-brown, moist, very stiff, moderate plosticity. GRAVELLY SANDY CLAY; brown, moist, stiff, plastic. CLAYEY SAND; predominantly medium, subangular to sub-round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plosticity, with interbedded gravels (minor); medium coarse, angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plosticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plosticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plosticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plosticity. GRAVELLY SANDY CLAY; gray-brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravels with medium coarse sand. CL GRAVELLY SANDY CLAY; gray-brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravels interbedded with fine to medium, subround, moderately to medium source, and the medium subround, moderately to medium subround to subround, moderately to medium subround to subround, moderately to medium subround to subround, moderately to medium subround to subround, moderately to medium subround to subround, moderately to medium subround								
SILTY CLAY; medium dark gray—brown, moist, very stiff, moderate plasticity. GRAVELLY SANDY CLAY; brown, moist, stiff, plastic. CLAYEY SAND; oredominantly medium, subangular to sub-round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, plastic. CLAYEY SAND; oredominantly medium, subangular to sub-round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. CLAYSILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray—brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray—brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray—brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray—brown, moist, stiff, moderate plasticity.						CL		sand; fine to medium, and gravel, medium coarse, angular.
Bentonite/ cement grout SILTY CLAY; medium dark gray-brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. CLAY SAND; Gradominantly medium, subangular to sub-round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sond. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravels with medium subround to angular gravel, precominantly siltstone and sandstones, with sand; fine to medium, subround to angular gravel, precominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity.	-10 -			1 1 1 1 1	:			
Bentonite/cement grout OH SILTY CLAY; medium brown, moist, stiff, plastic. CLAYEY SAND; predominantly medium, subangular to sub-round, moderately to poorly sorted quarts. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular, medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, medium coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. Centrolism Controlism Controlism Controlism CL CHAYESLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity.	-			cusing [2]				SILTY CLAY; medium dark gray-brown, moist, very stiff,
GRAVELLY SANDY CLAY; medium brown, moist, stiff, plastic. SILTY CLAY; medium brown, moist, stiff, plastic. CLAYEY SAND; predominantly medium, subangular to sub-round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity, with medium coarse angular gravels with medium coarse sand. CL. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, moderately plastic, interbedded with coarse angular gravels with medium coarse sand. CL. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subcound to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subcound, moderately to well sorted. CLAYSILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAYELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CLAYELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CLAYELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CLAYELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CLAYELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. CLAYELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity.						ŀ		
SILTY CLAY; medium brown, moist, stiff, plastic. CLAYEY SAND; predominantly medium, subangular to sub- round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plastic, interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray-brown, moist, stiff, plastic, interbedded with fine to medium, subangular gravel, predominantly siltstane and sandstones, with sand; fine to medium, subangular to subround to angular gravel, predominantly siltstane and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY, SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.				cement grout				
CLAYEY SAND: predominantly medium, subangular to sub- round, moderately to poorly sorted quartz. SILTY CLAY; medium dark brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plasticity, with interbedded with coarse angular gravels with medium coarse sond. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sond. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, medium brown, moist, stiff, moderately plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centrali er Cl. Silty CLAY; gray-brown, moist, stiff, plastic, interbedded with fine to medium, subround, moderately to well sorted. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.	- 15 -							GRAVELLY SANDY CLAY; brown, moist, stiff, plastic.
CLAYEY SAND: predominantly medium, subangular to sub- round, moderately to poorly sorted quartz. SILTY CLAY; medium dark brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plasticity, with interbedded with coarse angular gravels with medium coarse sond. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded with coarse angular gravels with medium coarse sond. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, medium brown, moist, stiff, moderately plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centrali er Cl. Silty CLAY; gray-brown, moist, stiff, plastic, interbedded with fine to medium, subround, moderately to well sorted. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.	├ -					1		
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CLAYEY SAND; predominantly medium, subangular to sub- round, moderately to poorly sorted quartz. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plastic, interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity, medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; medium brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY; SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. TOTAL DEPTH 61.1 FEET				[KA KA		СН		SILTY CLAY; medium brown, moist, stiff, plastic.
SILTY CLAY; medium dark brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centralizer	20-				1			CLAYEY SAND: predominantly medium, subangular to sub-
SILTY CLAY; medium dark brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. GC well sorted. GLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. TOTAL DEPTH 61.1 FEET	} -					SC		
SiLTY CLAY; medium brown, moist, stiff, moderate plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plastic, interbedded with coarse angular gravels with medium coarse sand. CL SiLTY CLAY; medium brown, moist, stiff, moderate plasticity. SiLTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray brown, moist, stiff, moderate plasticity.	-						1111	SILTY CLAY; medium dark brown, moist, stiff,
plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plastic, interbedded with coarse angular gravels with medium coarse sand. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray-brown, moist, stiff, plastic, interbedded minor medium, subround to angular gravels provided in medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.				[]				moderate plasticity.
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plasticity, with interbedded gravels (minor); medium coarse, angular. GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plastic, interbedded with coarse angular gravels with medium coarse sand. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray-brown, moist, stiff, plastic, interbedded minor medium, subround to angular gravels provided in medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity.	-				i			SILTY CLAY: medium brown, moist, stiff, moderate
GRAVELLY SANDY CLAY; medium brown, moist, stiff, moderately plastic, Interbedded with coarse angular gravels with medium coarse sand. CL SILTY CLAY; medium brown, moist, stiff, moderate plasticity. GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. Centraliter - CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. TOTAL DEPTH 61.1 FEET	F 7							
Bentonite pellets 46.6 to 48.8 ft CL CEntrailier Centralier Controller Co								angular.
Bentonite pellets 46.6 to 48.8 ft CL CEntrailier Centralier Controller Co	L ₹0 −							CRAVELLY CANDY CLAY, medium brown moiet stiff
Bentonite pellets 46.6 to 48.8 ft Centralicer 4 0.10 S.S. screen from 51 to 56 ft Centralicer Centralicer SILTY CLAY; medium brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subround, moderately to well sorted. Centralicer SILTY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. CLAY/SILTY (JAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY (JAY; gray-brown, moist, stiff, moderate plasticity.	┡╶┤							
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Bentonite pellets 46.6 to 48.8 ft Centraliter Centraliter Control to E6 ft Centraliter Centraliter Centraliter Control to E6 ft Centraliter Centraliter Control to E6 ft Centraliter Control to E6 ft Centraliter Control to E6 ft Centraliter Control to E6 ft Centraliter Control to E6 ft Centraliter Control to E6 ft Centraliter Control to E6 ft Contro	754	1				CI.		
Bentonite pellets 46.6 to 48.8 ft Centralizer - 4* .010 S.S. screen from 51 to 56 ft. Centralizer -	I					CL		SILTY CLAY: medium brown, moist, stiff, moderate
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC	I							
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC		ļ						
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC	- 40 -		ĺ					
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC	ŀ ⊣	İ		[7]				
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC	t 1						(III)	
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC	r 1		ļ	F. F. A.				
GRAVELLY SANDY CLAY; gray brown, moist, stiff, plastic, interbedded with fine to medium, subround to angular gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. Centraliter — GC GC GC GC GC GC GC GC GC GC GC GC GC	1.45	, I	1					
Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 4" .010 S.S. Screen from 51 to 56 ft. Centralizer - 50 Screen	}							
Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 50 ft. Ce	t 1		i					
Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 4" .010 S.S. screen from 51 to 56 ft. Centralizer - 50 ft. Ce	ב ז	l						
gravel, predominantly siltstone and sandstones, with sand; fine to medium, subangular to subround, moderately to well sorted. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. TOTAL DEPTH 61.1 FEET	-150 -	l						
screen from 51 to 56 ft.— Centrall er — CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. Bentonite backfill — 9.6" — 9.6" — TOTAL DEPTH 61.1 FEET	├ ┤	ĺ	ŀ			ا ۵.		
well sorted. Centrallier - CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. Bentonite backfill - 9.6" 70TAL DEPTH 61.1 FEET								
Centrallier CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. CLAY/SILTY CLAY; gray-brown, moist, stiff, moderate plasticity. TOTAL DEPTH 61.1 FEET	r i	i	l			GC		
PlC sand Bentonite backfill - 9.6" 9.6" plasticity. CL plasticity. TOTAL DEPTH 61.1 FEET	J-ar J	l		• • • • • • • • • • • • • • • • • • •				
PlC sand Bentonite backfill - 9.6" 9.6" plasticity. CL plasticity. TOTAL DEPTH 61.1 FEET	} →	l					HH	CLAY/SILTY CLAY; grav-brown, moist, stiff, moderate
Bentonite backfill 9.6" TOTAL DEPTH 61.1 FEET	t 1	i	ĺ	#1C sand				
60 - backfill - → 111111 TOTAL DEPTH 61.1 FEET - 9.6"	F]	l		Pentonite	1	CL		
TOTAL DEPTH 61.1 FEET	-60-					i		
9.6" - 9	ŀ →	∤					7777	TOTAL DEDT! ALL FEET
	t 1	l			[IDIAL DEPTH 61.1 FEET
	[]	l	Í	9.6"				
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1

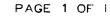


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	o _c						BORING NO. $W19-4(A)$
FEET	AMPLE & NUMBER	\ `		₹. 2 %.	SYMBOL	<u></u>	FIELD GEOLOGIST J. Hadsall COORDINATES N 338,292.7
콘	CAMPLE E & NUI	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	2,5	PROFILE	FIELD GEOLOGIST J. Hadsall EDITED BY B. Manchon DATE BEGAN 7/28/88
CEP TH	₹ %	REO -		SA S	nscs	ď.	CHECKED BY B. Manchon DATE FINISHED 7/28/88
35	TYPE				Š		TOTAL DEPTH 40 feet GROUND SURFACE EL. 8.25 ft.
- n -		ļ. —	107 01 1 1 1 1 1 1	<u> </u>		ļ	DESCRIPTION Asphalt on concrete.
<u> </u>	MD#1	6/18	12" Christy box 8"x5' standpipe	12,10,6	GM		
┣ -	MD#2	18/18	top of casing	5,5,8	GC	W	SILTY CLAYEY GRAVEL; mottled blk. and brn. stiff, plastic.
	MD#3	9/18		5,9,13	CH		SILTY CLA'r; black, elightly moist, etiff, plastic.
t :	MD#4	9/18		9,10,13	 -		SILTY CLAY; brown gray, slightly moist, stiff, low plasticity,
-	s	30/30			İ		with mudstone fragments.
- 10 -							SINDY OLD BUILD IN THE STATE OF
E :			4" sch. 40 steel				SANDY CLAY; light brown, slightly moist, soft, moderate plasticity, with mudstone fragments.
-	s	60/60	Bentonite/				
15		L	cement grout				
L 5							
F -	S	60/60			CL		
20-		ļ					
 							
F	S	60/60					
- 25 -							
F 7	S	60/60	Bentonite pellets か さ さ 27.5 to 29 ft. 日本	i			SILTY SANDY CLAYEY GRAVEL; light brown, moist, plastic,
30			4° .010 S.S.		GC		1/4-1/2" gravel clasts.
F +			screen from 31 to 36 ft.				
F 7	s	36/60	Centralizer		ML	Ш	CLAYEY SANDY SILT; brown, saturated, very soft, low plas
1					SW		GRAVELLY SAND; coarse sand with gravel, gray, wet, loose, very coarse gravel, subrounded with silt and sand <10%.
 			#1C sand	}		1111	SILTY CLAY; brown, moist, stiff, plastic.
F 7	s	54/60	Bentonite	ļ	CL SC		
1,51			backfill -		CL	7	CLAYEY SILTY SAND; brown, v. moist, v. soft, v. low plas CLAY; med. brown, moist, highly plastic.
- -			12"				TOTAL DEFITH 40 FEET
F 7							
1,5				l			
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<u>- 70</u>							

SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616 CLIENT: Moffett Naval Air Station Moffett Field, California





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					Т	Τ	BORING NO. SB19-1
V FEET	SAMPLE TYPE & NUMBER	ÆRY .)	WELL SUMMAR	35	YMBOL	를	FIELD GEOLOGIST_G_ L_ WILLIAMS COORDINATES E 1.552.686.9
DEPTH IN FEET	SAMP	RECOVERY (IN.)	WELL SUMMA	BLOWS ON	USCS SYMBOL	PROFILE	CHECKED BY J. Hadsall DATE BEGAN 9/15/88 CHECKED BY J. Hadsall DATE FINISHED 9/15/88 TOTAL DEPTH 15 feet GROUND SURFACE EL 10.73 ft.
- 0 -	1						DESCRIPTION
[]	MD#1	8/18		3,5,9	sc		CLAYER GRAVELLY SAND; reddish brown, non-plastic.
F 7	MD#2	11/18		4,7,1	3		SILTY CLAY; brownish black, moist, stiff to very stiff, moderate to high plasticity, trace pebbles and cobbles.
5 -	MD#3	11/18		5,7,8	-1 ^{on}		
	S	36/42		3.7.	-		SANDY SILTY CLAY; dark yellowish brown, wet, stiff, medium to low plasticity, trace of pebbles.
10-					CL.		<u> </u>
-	s	0/60			-		SANDY GRAVEL; dark yellowish brown, wet (saturated), loose.
15 -					GP		
							TOTAL DEPTH 15 FEET 8 diameter boring
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SAMELING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB19-1(MF21)

PAGE 1 OF 1



...Creating a Safer Tomorrow

					_		
	~						BORING NO. SB19-2
FEET	1	<u></u>		z~?	젒		1
2	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS STAMBOL	PROFILE	FIELD GEOLOGIST G. L. WIIIIams EDITED BY J. Hadsall DATE BEGAN 9/15/88
NI HTT	SAM) #		S S S	ß	P. P.	EDITED BY J. Hadsall DATE BEGAN 9/15/88 CHECKED BY J. Hadsall DATE FINISHED 9/15/88
7	٤	"			S		TOTAL DEPTH 15 feet GROUND SURFACE EL. 10.39 ft.
- 0 -		<u> </u>			L	1977	DESCRIPTION SILTY CLAYEY SAND; moist, soft, loose, non-plastic, with
<u> </u>	MD#1	10/18		3,5,10	sc		gravel and pebbles.
-	MD#2	9/18		5,9,11	OL		SILTY CLAY, dark brownish black, moist, very stiff to hard, low to moderate plasticity, some gravel and pebbles, trace
5 -					_	,,,,	cobbles. SILTY SANDY CLAY; dark yellowish brown, damp to moist,
t :	MD#3	7/18		5,6,4			stiff, low plasticity.
ŀ -	s	8/42		İ	CL		
10-		ļ					
† 3	_				SM		SAND; dark yellowish brown, wet, soft, loose, non-plastic,
t i	S	10/60		1			medium to fine, little silt. SILTY CLAYEY GRAVEL; dark yellowish brown, wet, soft, loose,
- 15 -					- GM	шш	
F 3							TOTAL DEPTH 15 FEET 8 diameter boring
<u>t</u> :				•		ĺ	
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SAMPLING METHODS: MD=California Modified

S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB19-2(MF21)

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...Creating a Safer Tomorrow

					 -	_	-	500000000000000000000000000000000000000
_ ,	pr;			}				BORING NO. SB19-3
DEPTH IN FEET	SAMPLE	\ \]	ر ج بد ر	USCS SYMBOL	w	COORDINATES N. 337.574.1 FIELD GEOLOGIST G. L. Williams E. 1.552.859.1
<u>z</u>	PIG N	RECOVERY	WELL SUMMAR	Y	BLOWS ON SAMPLER (PER 6")	SYN	PROFILE	FIELD GEOLOGIST G. L. WILLIAMS EDITED BY J. Hadsall DATE BEGAN 9/15/88
Ŧ	SAN F	REC.			SS S	SSS	ď	CHECKED BY J. Hadsall DATE FINISHED 9/15/88
) Ei	<u>}</u>	-				, O		TOTAL DEPTH 15 feet GROUND SURFACE EL. 10.65 ft.
-0-							1993	DESCRIPTION SILTY CLAYEY SAND; moist, red-orange brown, soft, non-
<u> </u>	MD#1	10/18			4,3,4	sc		plastic, some gravel. SILTY CLAY; dark brownish black, moist, very stiff to hard,
}	MD#2	10/18		-	4,7,8			SILTY CLAY; dark brownish black, moist, very stiff to hard, low to medium plasticity, some gravel and pebbles.
- 5				<u> </u>	3,5,4	OL		
	MD#3	9/18		F	3,3,4			SILTY SANDY CLAY; dark yellowish brown, damp to moist,
b 3	S	24/42	ĺ					stiff, low plasticity.
-10 -						CL		
F 3	s	0/60		- 1	Ì	CL		
t d		0/60						
-15 -							0777	TOTAL DEDTH AS CITET
F								TOTAL DEPTH 15 FEET 8" diameter boring
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO .: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB19-3(MF21)

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					,		,
	ac						BORING NO. SB19-4
FEET	SAMPLE TYPE & NUMBER	≿		* ~ . ^	SYMBOL	.	COORDINATES N 338,094.1
z	SAMPLE E & NUI	RECOVERY (IN.)	WELL SUMMAR	BLOWS ON SAMPLER	3.4	PROFILE	FIELD GEOLOGIST G. L. WIlliams COORDINATES N. 338.094.1 E 1,552,473.9
DEPTH IN	SAM 3	G		SAL SAL	nscs	P.R.	CHECKED BY J. Hadsall DATE BEGAN 9/14/88 CHECKED BY J. Hadsall DATE FINISHED 9/14/88
DE.P	3 2	°C		" ~	ì		TOTAL DEPTH 15 feet GROUND SURFACE EL. 9.86 ft.
- c -							DESCRIPTION
F ` -	140.83	11,′18		4,10,13			CLAYET SAND; dark orange-red brown, moist, hard, non- plastic, pebbles and cobbles.
	MD#1				GC-		, , ,
<u></u>	MD#2	7/18		6,6,8	1		
- 5 -	MD#3	10/18		7,9,13	OL		SILTY CLAY: brownish black, moist, very stiff, low to medium plasticity.
-	s	42/42					SANDY SILTY CLAY; dark yellowish brown, moist, stiff, low
10-							to non-plastic.
					CL		
F 3	S	48/60					SANDY SILTY CLAY; dark greenish gray, damp, very soft.
-15 -							
-			1				TOTAL DEPTH 15 FEET
F 7	•						8" diameter boring
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California

AutoCAD FILE: SB19-4(MF21)

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	-						BORING NO. SB19-5
133	SAMPLE TYPE & HUMBER	_			፬		4
DEPTH IN FEET	ירב גיטא	RECOVERY (:N.)	WELL SUMMARY	SAMPLER	USCS SYMBOL	PROFILE	FIELD GEOLOGIST G. L. Williams COORDINATES N. 338.087.8 E 1.552.450.3
ž	AM &	οz U	W. C. C. C. C. C. C. C. C. C. C. C. C. C.	SAMP PER PER	Si	õ	FDITED BY J. Hadsall DATE BEGAN 9/13/8 CHECKED BY J. Hadsall DATE FINISHED 9/14/88
EP 1	TP. S.	A.		m ".	Sc	"	CHECKED BY J. Hadsall DATE FINISHED 9/14/88 TOTAL DEPTH 15 feet GROUND SURFACE EL. 10.09 ft.
	<u>_</u>						DESCRIPTION
F 0 d				1		1111	SAND; orange brown, moist, loose, trace clay with cobbles
F -	MD#I	8/18		6,7.15	SC- GC		and pebbles.
	\$	0/30		ļ	GC		
- 5 -	MD#2	11/18					CLAY; brownish black, moist, very stiff, medium plasticity.
	WC#2			\	OL		CLAT; Brownian Black, moist, very stin, medium prosticity.
F →	s	42/42		1			SILTY CLAY; dark yellowish brown, moist, soft, low to
10				ł	ł		moderate plasticítý.
\mathbf{F}					CL		
FF	s	60/60		1			
t,5							
- 15 -				ì	1		TOTAL DEPTH 15 FEET
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SAMPLING METHODS: MD=California Modified S=Split Barrel

PROJECT NO.: 409616

CLIENT: Moffett Naval Air Station Moffett Field, California PAGE 1 OF 1



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